



**PROPOSAL, SPECIAL PROVISIONS,
AND SAMPLE CONTRACT
FOR
CAMINO PABLO MEDAINS LANDSCAPE IMPROVEMENTS**

City Project No.: 4136

**SUBMIT TO:
CITY OF ORINDA
DEPARTMENT OF PUBLIC WORKS AND
ENGINEERING SERVICES
22 ORINDA WAY
ORINDA, CA 94563**

BID OPENING DATE: Tuesday, September 11, 2018, 2:00 pm

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I. INTRODUCTION AND GENERAL INFORMATION

The City of Orinda is seeking bids for Camino Pablo Medians Landscape Improvements project. Medians are located between south of Miner Road and north of Santa Maria Way. This project includes work on "Median A, B, C and D" as designated in the project plans.

NOTICE TO BIDDERS: REQUEST FOR BIDS

NOTICE IS HERBY GIVEN that the City Council of the City of Orinda, State of California, hereby calls for sealed proposals to be received by the City Clerk of the City of Orinda, 22 Orinda Way, Orinda, California on or before Tuesday September 11, 2018, at 2:00 p.m.

Description of work: Proposals shall cover the furnishing of all labor, materials, equipment, workmanship, transportation and services which are required for: Camino Pablo Medians Landscape Improvements which generally includes: demolishing existing landscape and irrigation; excavating and installing new irrigation system; planting trees, shrubs, and groundcover; placing boulders as detailed in this Proposal, Special Provisions, Plans, General Conditions, Construction Contract, and Appendix attached hereto.

No. of Working Days: 35

Liquidated Damages: \$1,200 per calendar day

Engineer's Estimate: \$110,000

A pre-bid meeting will be held on Thursday August 30, 2018 at 2:00 p.m. at the City Offices to cover project construction. Prospective bidder's attendance is recommended, but not mandatory.

Proposals: Interested contractors shall submit their sealed proposal on the "Bid Form" found in this document. The proposal envelope is to be addressed to: Sealed Proposal, City of Orinda, City Clerk, 22 Orinda Way, Orinda, CA 94563, and have the name of the project, "Camino Pablo Medians Landscape Improvements", noted thereon.

At 2:00 pm. on September 11, 2018, the bids will be taken by the City Clerk of the City of Orinda. The proposals will be publicly read by the City Clerk.

Qualifications: The contractor shall possess a valid State of California Contractors License Class A or Class C-27 at the time this contract is awarded. Prior to submitting a proposal, the contractor and subcontractors must be registered with the Department of Industrial Relations as explained below. The contractor submitting a quotation for this work shall be experienced in landscape construction, renovation, and maintenance.

Requests for information before or after the award of contract shall be directed to:

Larry Theis
Director of Public Works
City of Orinda
22 Orinda Way
Orinda, California 94563
Email: LTheis@cityoforinda.org

Requests for interpretations shall be made in writing and delivered to the contact person listed above at least three (3) working days **(by 2:00 p.m. September 6, 2018)** before the time announced for opening the bids. Interpretations, where necessary, will be made in the form of an addendum to the Contract Documents and, when issued, will be available to all perspective bidders on the City web site. All such addenda shall become part of the Contract Documents.

Weighing Criteria: Proposals will be evaluated based on the contractor's proposed bid pricing. The City will be selecting the lowest responsible bidder.

Prevailing Wage and Registration with DIR: This is a public works project within the meaning of Chapter 1 Part 7 of Division 2 of the California Labor Code (Sections 1720 *et seq.*). Contractors and all subcontractors are not qualified to bid on or be listed in the bid proposal, subject to the requirements of section 4104 of the California Public Contract Code, and shall not engage in the performance of any work under the contract, unless currently registered with the Department of Industrial Relations (DIR) and qualified to perform public work pursuant to section 1725.5 of the Labor Code. No contractor or subcontractor may be awarded the contract unless registered with DIR pursuant to Labor Code section 1725.5.

In accordance with Labor Code Section 1771, the contractor and all subcontractors on this public works project shall pay not less than current prevailing wage rates as determined by the California Department of Industrial Relations. Copies of such prevailing rate of per diem wages are on file at the Orinda City Offices, 22 Orinda Way, Orinda, CA 94563. The work performed on this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

No contractor or subcontractor who is ineligible to bid, work on, or be awarded, a public works project under Labor Code Sections 1771.1 or 1777.7 can bid on, be awarded, or perform work as a contractor or subcontractor on this project.

Insurance and Bonds: Attention is directed to Sections 6, 7, 8 & 9 of the Construction Contract, (located in the Appendix) which includes insurance requirements. Contracts over \$25,000 are also required to include a Performance Bond and a Labor and Materials Bond for 100% of the contract price, Exhibits B & C of the Construction Contract.

II. BIDDING

1. Request for Bid

The City is issuing this Request for Bid, available on the City's web site at no fee. Any addendums issued will be available on the web site as they are issued. It is the Bidders responsibility to check the web site for any addendums to this Request for Proposal.

2. Acknowledgement of addendum

Bidders shall acknowledge receipt of any addendum to the solicitation by signing and returning the addendum with the bid.

3. Bid Submission

By submitting a bid, (only accepted on the enclosed Bid Form), bidders acknowledge that they have examined the job site and Contract Documents and are satisfied with them.

An authorized agent may withdraw a bid before the bid opening by submitting a written withdrawal request. Withdrawal does not prevent submitting a new, timely bid. Bidders may not withdraw their bids after the bid opening.

Any bid submitted as a result of the solicitation shall be binding on the bidder until expiration. All bids will expire on the 36th day after bid opening unless the City and Bidder(s) mutual agree to extend the award period beyond the 36th day after the bid opening. No bid shall be considered binding upon the City until the award of the Contract by the City Council. The City reserves the right to reject all bids.

Submit your bid with one of the following forms of bidder's security equal to at least 10 percent of your bid:

1. Certified Cashier's check
2. Bidder's bond signed by a surety insurer who is licensed in California

The bidder security shall be made payable to the City of Orinda.

4. Bid Documents from Other Sources

There are no assurances to Bidders who acquire project bid documents from sources other than directly from the City of Orinda's website that they will receive project addenda. Such Bidders are solely responsible for acquiring any addenda by routinely checking back at the City's website before the bid opening.

5. Bid Protests

Submit any bid protest in writing to the City of Orinda at 22 Orinda Way Orinda, CA 94563 to the attention of the Public Works Director. Any protest relating to the form or content of the bidding or contract shall be submitted no later than three (3) working days before the bid opening. Any person who submits a bid shall be deemed to have waived any protest to the form or content of the proposal documents.

Any protest relating to any particular proposal or the award of the Contract must be submitted in writing to the Engineer. The protest must be received no later than 5:00 p.m. on the third (3rd) business day after the bid opening.

Pursuant to Labor Code section 1771.1(c), an inadvertent error in listing a subcontractor in a bid proposal who is not registered pursuant to Labor Code section 1725.5 will not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that any of the following apply:

1. Subcontractor is registered prior to the bid opening
2. Within 24 hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in subparagraph (E) of paragraph (2) of subdivision (a) of Labor Code section 1725.5
3. Subcontractor is replaced by another registered subcontractor pursuant to Public Contract Code section 4107

The initial protest document shall contain a complete statement of the basis for the protest and shall refer to the specific portion(s) of the contract that forms the basis for the protest.

The protest shall be signed and include the name, business address and telephone number of the person representing the protesting party.

The party filing the protest shall concurrently transmit a copy of the initial protest document and any attached documentation to all other parties who have a direct financial interest that may be adversely affected by the outcome of the protest. Such parties shall include all other bidders who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest. The documents shall be transmitted by certified mail.

The procedure and time limits set forth in this section are mandatory and are the sole and exclusive remedy in the event of protest. Failure to comply with these procedures shall constitute a waiver of any right to further pursue the protest, including filing a Government Code claim or instituting legal proceedings.

6. Irregular Bids

The City reserves the right to reject bids that do not comply with the requirements herein; that are incomplete, obscure, or irregular; or bids in which unit prices are unbalanced in the opinion of the City. The City reserves the right to reject defective bids or to waive technical defects, as the interests of the City may require. The City reserves the right to resolve irregularities in the bid. The City may determine that bidders who have previously failed to bid properly or to complete on time a contract of any nature are not responsible bidders.

7. Collusion among Bidders

If the City has reason to believe that collusion exists among bidders, the City will reject the bids of all known participants in such collusion.

8. Contract Execution

The successful bidder must sign the Contract and all Contract Exhibits and provide all necessary evidence of insurance, bonds, licenses, and certificates by the 8th business day after the bidder has received the contract for execution. Failure to do so will be cause for annulment of the award.

III. GENERAL CONDITIONS

1. Warranty and Guarantee

Contractor shall maintain installed landscape planting for a sixty-day period after City's accepts all work as complete and all punchlist items are addressed. The acceptance of the contract by the City Council shall occur after this sixty-day maintenance period. The release of retention shall occur after 35 days from the filing of a Notice of Completion with the Contra Costa County Clerk Recorder.

Contractor warrants to City that all materials and equipment furnished shall be new, free from liens, encumbrances, faults and defects, and of good quality and fit for the purpose intended.

Contractor warrants and guarantees for one (1) year from and after the date the City accepts the Work that the materials and labor necessary for the Work shall operate as provided for in the Contract Documents. During the term of this warranty, Contractor shall, without delay, provide all materials, parts and labor, at its own expense, which are necessary to repair and/or correct any and all defects, installation or operational failures in the equipment from any cause so that said Work will function successfully as originally contemplated. Notwithstanding the foregoing, Contractor shall not be required to bear the expense of correction of any failure in the equipment that is caused by the sole or active negligence or willful misconduct of the City. Should Contractor fail to act promptly or in accordance with this requirement, or should the situation require that repairs or replacements be made before Contractor can be notified, the City may, at its option, make the necessary repairs or replacements or perform the necessary work and Contractor shall pay to the City the actual cost of such repairs. Contractor shall also pay to the City any attorneys' fees incurred to enforce this guaranty.

2. Liquidated Damages

If Contractor fails to complete the Work within the Contract Time, the City will sustain damage. The actual occurrence of damages and the actual amount of the damages which the City would suffer if the Work were not completed within the Contract Time would be impracticable and extremely difficult to determine. Damages the City would suffer in the event of delay include, but are not limited to, loss of the use of the Work, costs of administration, inspection, supervision and the loss suffered by the public within the City.

Accordingly, the parties agree that the amount herein set forth is a reasonable estimate of the damages which the City shall incur upon failure of the Contractor to complete the Work within the Contract Time: One Thousand Two Hundred Dollars per day (\$1,200/Day), for each calendar day by which completion of the Work is delayed beyond the Contract Time. Contractor agrees to pay such liquidated damages as herein provided, and in case the same are not paid, agrees that the City may deduct the amount thereof from any monies due or that may become due to the Contractor under the Contract.

Contractor will not be assessed with liquidated damages or the cost of engineering and inspection during the delay in the completion of the Work caused by acts of God or of the public enemy, fire, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather or delays of subcontractors due to such causes, provided that the Contractor shall within five (5) days from the beginning of any such delay notify the Project Engineer, in writing, of the causes of delay. The Project Engineer shall ascertain the facts and the extent of delay, and the Project Engineer's findings thereon shall be final and conclusive.

3. Conduct of the Work

Contractor shall:

- Do all things necessary to faithfully perform and complete the Work in a competent manner.
- Ensure all necessary permits and approvals for the Work have been obtained.
- Protect the Work, including all materials to be used in the Work, and existing facilities and personal property.
- Keep itself fully informed of and comply with all applicable laws, ordinances and decrees, which in any manner affect the conduct of the Work.

4. Schedule and Work Hours

The Contractor shall schedule operations not to begin prior to 7:30 a.m. and to conclude by 5:00 p.m. Monday through Saturdays and shall not schedule operations on Sundays and holidays.

Camino Pablo is a heavily traveled roadway, work area adjacent to the center medians will be restricted during commute hours. Contractor must follow lane closure restrictions as specified in the Special Provisions.

Use of power equipment is authorized on weekdays beginning at 8:00 a.m. and on Saturdays beginning at 10:00 a.m. The Contractor shall provide the Project Engineer/Inspector with a work schedule acceptable to the City 48 hours in advance of the start of any work.

The Contractor shall cooperate and coordinate with the City, including its other construction projects, while the Work is underway. The Project Engineer/Inspector shall have the authority to suspend the Work, wholly or in part, for such a period as the Project Engineer/Inspector may deem necessary.

5. Changes in Work

Contractor shall make no changes in the Work without written direction from the City. Contractor shall not be compensated for any change made without any such written direction. No changes in the Work covered by this agreement shall exonerate any surety or any bond given in connection with this agreement.

As provided in Caltrans Standard Specifications section 9-1.03, if the City directs the Contractor in writing to make changes in the Work that materially affect the cost of performing the Work, the City will pay for the change based on one or a combination of the following: (1) bid item prices, (2) force account, (3) agreed price, (4) specialist billing.

If the City directs the Contractor in writing to make changes in the Work that Contractor demonstrates materially affect the time required to perform the work, the City will make a reasonable adjustment to the Contract Time.

6. Utility Facilities

Attention is directed to the possible existence of underground facilities not known to the City, or in a location different from that which is shown on the plans or in the Special Conditions. The Contractor shall take all steps reasonably necessary to ascertain the exact location of all underground facilities prior to

doing work that may damage such facilities or interfere with their service, including but not limited to calling USA utility locator service to mark utilities and performing potholing when necessary.

The Contractor shall protect from damage any utility facilities that are to remain in place, be installed, relocated or otherwise rearranged.

If Contractor while performing the Work discovers utility facilities not identified in the Contract Documents, Contractor shall immediately notify the City and the utility provider. City shall arrange the removal, relocation, or protection of existing main or trunk line utility facilities located at the site of the Work but not identified in the Contract.

Contractor will not be entitled to damages or payment for delays caused solely by the failure of City, or the utility provider, to provide for removal or relocation of existing main or trunk line utility facilities not identified in the Contract Documents, except for equipment necessarily idled during such work.

Contractor shall not be assessed liquidated damages for delay in completing the Work solely attributable to the failure of City, or the owner of the utility, to provide for removal or relocation of existing main or trunk line utility facilities not indicated in the Contract Documents with reasonable accuracy.

7. Differing Site Conditions

The Contractor shall promptly, and before the following conditions are disturbed, notify the City in writing of any:

Material that the Contractor believes may be hazardous waste, as defined in Section 25117 of the Health and Safety Code; or

Physical conditions at the site differing materially from those indicated by information about the site made available to bidders.

The City shall promptly investigate the conditions, and if it finds that such conditions do materially so differ, or do involve hazardous waste, and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the Work, it shall issue a change order under the provisions described in the Contract Documents and Contractor shall not be excused from completing the Work.

8. Extension of Time

In case Contractor fails to complete the Work in within the Contract Time, the City shall have the right to extend the Contract Time or not. If it decides to extend the Contract Time, City shall have the right to charge to the Contractor and to deduct from the payment for the Work the actual cost of overhead expenses chargeable to the Contract, and which accrue during the period of such extension.

In the event that the Contractor's work is delayed for any reason, including acts of City, Contractor's sole remedy shall be an extension of time equal to the period of delay, provided Contractor has given City written notice of the commencement of delay within 48 hours of its occurrence.

9. Workmanship and Quality Level

All work shall be performed by experienced personnel directly employed and supervised by the Contractor. The Contractor shall provide management and technical supervision daily through competent foreman as required.

The Contractor shall be responsible for the skills, methods and actions of all employees.

The Contractor shall cooperate with the representative authorized by the City to enable them to determine the Contractor's conformity with these specifications and the adequacy of the work being performed. The Contractor shall give personal daily supervision of the work and be available for consultation with the Engineer, Inspector, or City designated representative.

10. Corrective Work

The Contractor shall perform the Work under the direction, and to the satisfaction, of the Project Engineer. The Engineer may make inspections at any time and request from the Contractor corrective work. If corrective work is required, the City will provide a written list of items, the Contractor shall correct the deficiencies within 24 hours. If deficiencies are not corrected, the City will deduct from the Contractor's payment, pro rata, those applicable portions of the contract sum.

11. Use of City Equipment

The City shall not be responsible for any damage to persons or property as a result of the use, misuse or failure of any equipment used by Contractor, or by any of its employees, even though such equipment be furnished, rented or loaned to Contractor by City.

12. Communication and Notices

The City's Project Engineer/Inspector is authorized to interpret and define City's policies consistent with this agreement. All communications shall be directed to or through the Project Engineer or the Project Engineer's designee.

In General. All notices or communication concerning a party's compliance with the terms of this agreement shall be in writing and may be given either personally, by certified mail, return receipt requested, or by overnight express carrier. The notice shall be deemed to have been given and received on the date delivered in person or the date upon which the postal authority or overnight express carrier indicates that the mailing was delivered to the address of the receiving party. The parties shall make good faith efforts to provide advance courtesy notice of any notices or communications hereunder via e-mail. However, under no circumstances shall such courtesy notice satisfy the notice requirements set forth above.

13. Addresses for Notice.

Notices or communications shall be given to the parties at the addresses set forth in signed Construction Contract unless otherwise designated in a written notice to the other party.

14. Labor and Prevailing Wage

The Contract is subject to the provisions of Chapter 1 Part 7 of Division 2 of the California Labor Code (Sections 1720 et seq.), and Contractor and any subcontractor shall pay not less than the prevailing rates of wage as determined by the California Department of Industrial Relations (“DIR”) to all workers employed in performance of the Work. Pursuant to the provisions of Section 1770 of the Labor Code, the City has obtained the general prevailing rate of wages and employer payments for health and welfare, vacation, pension and similar purposes in the vicinity of the Work, a copy of which is on file in the office of the City, and shall be made available for viewing to any interested party upon request. Full compensation for conforming to the requirements of this section shall be deemed included in the prices paid for the various contract items of work, and no separate payment will be made therefor.

Contractor and all subcontractors are not qualified to bid on or be listed in a bid proposal, subject to the requirements of section 4104 of the California Public Contract Code, and shall not engage in the performance of any work under this contract, unless currently registered and qualified to perform public work pursuant to section 1725.5 of the California Labor Code. Contractor represents and warrants that it is, registered and qualified to perform public work pursuant to section 1725.5 of the California Labor Code unless otherwise noted in supplemental provisions hereto.

Contractor shall post at the job site the determination of the director of the prevailing rate of per diem wages together with all job site notices that are required by regulations of the DIR.

As required by Labor Code Section 1773.8, the Contractor shall pay travel and subsistence payments to each worker needed to perform the Work, as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed in accordance with Section 1773.8.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. Contractor and any subcontractors shall keep accurate payroll records, in accordance with Section 1776 of the Labor Code, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by Contractor or subcontractor in connection with the Work and shall furnish the records specified in California Labor Code section 1776 directly to the Labor Commissioner at least monthly in a format prescribed by the Labor Commissioner and otherwise in accordance with law.

The Contractor or subcontractor shall, as a penalty to City, forfeit twenty-five dollars (\$25) for each worker employed in the execution of the contract by the respective contractor or subcontractor for each calendar day during which the worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week in violation of the provisions of state prevailing wage law.

Contractor’s attention is directed to the provisions in Section 1777.5 and 1777.6 of the Labor Code concerning the employment of apprentices by the Contractor or any subcontractor. It shall be the responsibility of the Contractor to effectuate compliance on the part of itself and any subcontractors with the requirements of said sections in the employment of apprentices. Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial

Relations, ex-officio the Project Engineer of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

15. Nondiscrimination

In connection with the performance of the Work under this contract, Contractor will not because of the race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status of any person, to refuse to hire or employ the person or to refuse to select the person for a training program leading to employment, or to bar or to discharge the person from employment or from a training program leading to employment, or to discriminate against the person in compensation or in terms, conditions, or privileges of employment, unless based upon a bona fide occupational qualification or applicable security regulations established by the United States or the State of California, or as otherwise provided in section 12940 of the Government Code.

As provided in Labor Code section 1735, a violation of this provision is subject to all penalties imposed for a violation of Division, 2, Part 7, Chapter 1 of the Labor Code including the monetary penalties provided in Labor Code section 1775.

16. License Requirement

Contractor's attention is directed to Business and Professions Code Sections 7000 et seq. concerning the licensing of contractors. At the time Contractor submits its bid to the City and all times Contractor is performing the Work, Contractor shall have a valid license issued by the Contractors State License Board in the classification stated in the Special Provisions. Contractor and all subcontractors shall be licensed in accordance with the laws of this State and any contractor or subcontractor not so licensed is subject to penalties imposed by such laws.

CONTRACTORS ARE REQUIRED BY LAW TO BE LICENSED AND REGULATED BY THE CONTRACTORS' STATE LICENSE BOARD WHICH HAS JURISDICTION TO INVESTIGATE COMPLAINTS AGAINST CONTRACTORS IF A COMPLAINT REGARDING A PATENT ACT OR OMISSION IS FILED WITHIN FOUR YEARS OF THE DATE OF THE ALLEGED VIOLATION. A COMPLAINT REGARDING A LATENT ACT OR OMISSION PERTAINING TO STRUCTURAL DEFECTS MUST BE FILED WITHIN 10 YEARS OF THE DATE OF THE ALLEGED VIOLATION. ANY QUESTIONS CONCERNING A CONTRACTOR MAY BE REFERRED TO THE REGISTRAR, CONTRACTORS' STATE LICENSE BOARD, P.O. BOX 26000, SACRAMENTO, CALIFORNIA 95826.

17. Assignment and Subcontracting

Contractor shall conform to the requirements of Section 4100 through 4113 of the Public Contract Code, the Subletting and Subcontracting Fair Practices Act.

The Contractor is prohibited from performing work on the Project with a subcontractor who is ineligible to perform work on a public works project pursuant to Labor Code Section 1771.1 or 1777.7.

When a portion of the work which has been subcontracted by the Contractor is not being prosecuted in a manner satisfactory to the City, the subcontractor shall be removed immediately on the request of the City and shall not again be employed on the Work.

Contractor may not assign performance of the Contract or any of its rights except upon prior written consent of the City.

Contractor shall require all subcontractors to comply with the terms of this agreement.

18. Termination

Should Contractor fail within ten (10) days from receipt of City's written notice to correct any contractual deficiencies, including but not limited to failure to perform the Work in accordance with the Contract Documents, failure to comply with the directions of City, or failure to pay its creditors, City may terminate this agreement for default. Following a termination for default, City shall have the right to take whatever steps it deems necessary to correct and complete the work and charge the cost thereof to Contractor, who shall be liable for the full cost of City's corrective action, including reasonable overhead, administrative costs, and attorneys' fees. If the failure to perform or the manner of performance results in a threat to public health or safety, the City may, after making a reasonable attempt to contact you, perform necessary emergency work and deduct the reasonable cost of it from the amount owed to you.

City may at any time terminate the Contract at City's convenience upon 10 days written notice to Contractor; in the event of termination for convenience, Contractor shall recover only the amount due under the contract for Work completed to the date of termination in accordance with the Contract Documents, less amounts paid to date. Contractor shall not be entitled to any claim or lien against City for any additional compensation or damages in the event of such termination.

If City terminates Contractor for cause, and if it is later determined that the termination was wrongful, such default termination shall automatically be converted to and treated as a termination for convenience. In such event, Contractor shall be entitled to receive only the amounts payable under this section, and Contractor specifically waives any claim for any other amounts or damages, including, but not limited to, any claim for consequential damages or lost profits.

19. Conflict of Interest and Noncompetitive Practices

Contractor represents that to the best of its knowledge no officer or employee of the City has any financial interest in this transaction or in the business of Contractor; has used his or her position considering or approving the Contract for private gain or advantage; or has received any money or other consideration for approval of this Contract. Contractor further represents that to the best of its knowledge no officer or employee of the City is engaged in any employment, activity, or enterprise for compensation which is inconsistent, incompatible, in conflict with, or inimical to his or her duties in approving this Contract. If any such interest, employment, activity, or enterprise comes to the knowledge of Contractor at any time, a full and complete disclosure of all such information shall be made in writing to the City, even if such interest would not be considered a conflict of interest under Article IV Division 4 Section 1090 or section 1126 of the Government Code of the State of California. No officer, or employee of the City or of any of its member jurisdictions during his/her tenure of office, or for one year thereafter, shall have any interest, financial or otherwise, in this Contract or the proceeds therefrom.

Contractor represents and agrees that it does not and shall not have any direct or indirect pecuniary or proprietary interest that conflicts in any manner or degree with the services required to be performed under this Contract and that it shall not employ any person or agent having such an interest. In the event that the Contractor or its agents, employees, or representative hereafter acquires such a conflict of interest, it shall immediately disclose such interest to the City and take action immediately to eliminate the conflict or to withdraw from this Contract, as the City may require. Contractor assures that no person, except bona fide employees of Contractor, has been retained to secure this Contract for a contingent fee or commission, and no gratuities were offered by Contractor or any of its agents to any official or employee of the City with a view toward securing this Contract or influencing its terms.

20. Hold Harmless and Indemnification

The City of Orinda and all officers, employees, and agents thereof connected with the Work, shall not be answerable or accountable in any manner: for any loss or damage that may happen to the Work or any part thereof; for any loss or damage to any of the materials or other things used or employed in performing the Work; for injury to or death of any person; or for damage to property from any cause except losses due to sole or active negligence of the City's officers or employees.

To the fullest extent allowed by law, Contractor shall defend, indemnify and hold harmless the City, its elected and appointed officials, employees and agents, from all liability, penalties, costs, losses, damages, expenses, causes of action, claims or judgments, including attorneys' fees and other defense costs, resulting from injury to or death sustained by any person (including Contractor's employees and subcontractors), or damage to property of any kind, or any other injury or damage whatsoever, which injury, death or damage arises out of or is in any way connected with the performance of the Work, regardless of Contractor's fault or negligence, including any of the same resulting from City's alleged or actual negligent act or omission, or its agents, contractors or employees; except that said indemnity shall not be applicable to injury, death or damage to property arising from the sole or active negligence or willful misconduct of City, its constituent entities, its and their officers, agents, or servants who are directly responsible to City. In instances where the City's active negligence accounts for only a percentage of the liability involved, the obligation of Contractor will be for that entire portion of percentage of liability not attributable to the active negligence of the City.

Contractor shall be obligated to immediately defend, with counsel approved by the City, any suit or action brought against the City, its elected and appointed officials, employees and agents, founded upon any claim of injury to or death sustained by any person (including Contractor's employees and subcontractors), or damage to property of any kind, or any other injury or damage whatsoever, which injury, death or damage arises out of or is in any way connected with the performance of the Work, whether or not liability is established. If it is finally adjudicated that liability was caused by the sole active negligence or sole willful misconduct of an indemnified party, Contractor may submit a claim to the City for reimbursement of reasonable attorneys' fees and defense costs. This indemnification and duty to defend shall extend to claims asserted after termination of this Contract for whatever reason.

In addition to any remedy authorized by law, as much of the money due Contractor under and by virtue of this Contract as shall be considered necessary by the City, may be retained by the City until disposition has been made of such suits or claims for damage.

The City and Contractor shall timely notify each other of the receipt of any third-party claim relating to the contract. The City shall be entitled to recover its reasonable costs incurred in providing such notification.

21. Payment

Payment shall be made payable to Contractor and delivered to the address specified in the Contract Administration section of this agreement. The making of any payment by City, or the receipt thereof by the Contractor, shall in no way lessen the liability of the Contractor to correct or revise unsatisfactory work, even though the unsatisfactory character of such work may not have been apparent or detected at the time such payment was made.

22. Monthly invoices.

Contractor shall submit invoices, not more often than once a month during the term of this agreement, based on the cost for work performed in accordance with the unit prices in the scope of work prior to the invoice date. If the scope of work does not include unit prices, progress payments for lump sum bid items will be a percentage of the lump sum bid item price based on the Project Engineer's/Inspector determination of the amount of the lump sum work already performed.

Invoices shall contain the following information:

Serial identifications of bills, i.e., Bill No. 1;

The beginning and ending dates of the billing period;

A summary containing the total contract amount, the amount of prior billings, the total due this period, percentage of work completed, the remaining balance available for all remaining billing periods, and a brief description of work completed during the billing period.

City shall make monthly payments, based on such invoices, for satisfactory progress in completion of the scope of work, less five percent retention. The City will release retained funds 35 days after the filing of Notice of Completion with Contra Costa County Clerk Recorder.

The City will make any progress payment within 30 days after receipt of an undisputed and properly submitted payment request as provided by Public Contract Code section 20104.50.

23. Additional Payment Terms.

Attention is directed to Section 9 of the State of California, Department of Transportation Standard Specifications (2010) which includes additional procedures and details for determination of payments, compensation for extra work by force account, partial payments, and final payments.

24. Claims

If any dispute shall arise between City and Contractor regarding performance of the work, or any alleged change in the work, Contractor shall timely perform the disputed work and shall give written notice of a claim for additional compensation for the work to City within ten (10) days after commencement of the

disputed work. Contractor's failure to give written notice within the ten (10) day period constitutes an agreement by Contractor that it will receive no extra compensation for the disputed work.

25. Records and Audits

Contractor and its subcontractors shall establish and maintain records pertaining to this Contract, including properly executed payrolls, time records, invoices and vouchers. Contractor shall maintain all records relating to charges to the City and performance under this Contract for a minimum period of three (3) years, or for any longer period required by law, from the date of final payment to Contractor under this Contract.

Any records required to be maintained pursuant to this Contract shall be made available for inspection, copying or audit, at any time during regular business hours, upon written request by the City for the purpose of verifying statements submitted by Contractor to City and Contractor shall provide such assistance as may be reasonably required in the course of such inspection.

Pursuant to California Government Code section 8546.7, the parties to this Contract may be subject to the examination and audit of representative of the Auditor General of the State of California for a period of three (3) years after final payment under the Contract. Any such examination and audit shall be confined to those matters connected with the performance of this Contract including, but not limited to, the cost of administering the Contract.

26. Antitrust

By entering this contract, Contractor conveys, sells, assigns, and transfers to the City of Orinda all rights, titles, and interest and all causes of action it may now have or hereafter acquire under the antitrust laws of the United States and the State of California arising from purchase of goods, services, or materials pursuant to this contract or any subcontract.

27. Workers Compensation

By signing this Agreement, Contractor certifies the following "I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions before commencing the performance of the work of this contract."

28. Jurisdiction

This agreement and all matters related to it shall be administered and interpreted under the laws of the State of California. Jurisdiction of litigation arising from this agreement shall be in that state and venue shall be in Santa Clara County, California.

29. Time

Time is of the essence of this agreement.

30. Severability

If any part of this agreement is found to conflict with applicable laws, such part shall be inoperative, null and void insofar as it conflicts with said laws, but the remainder of this agreement shall be in full force and effect.

31. Parties in Interest

This agreement is entered only for the benefit of the parties executing this agreement and not for the benefit of any other individual, entity or person.

32. Waiver

Neither the acceptance of work or payment for work pursuant to this agreement in whole or in part, shall constitute a waiver of any rights or obligations arising under this agreement. The failure by the City to enforce any of Contractor's obligations or to exercise City's rights shall in no event be deemed a waiver of the right to do so thereafter.

33. Modification of Caltrans Standards

Section 9 of the State of California, Department of Transportation Standard Specifications (2010) are specifically modified as shown below. Any modifications or additions are enumerated to correspond with the numbering of the paragraphs in the Standard Specifications, dated 2010, and shall apply regardless of whether those standards have been renumbered or reorganized by any Revised Standard Specifications. The State Standard Specifications, may be viewed at the Caltrans' web page at: http://www.dot.ca.gov/hq/esc/oe/construction_standards.html.

Contract Acceptance means approval by City Council to accept a completed contract when the contract was awarded by the City Council. When the contract was not awarded by the City Council, acceptance shall be by the City Project Engineer. Department means the City of Orinda. Engineer or Director means the City Project Engineer, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

Add to Section 9-1.06A:

The provisions of Section 9-1.06B and 9-1.06C, "Changed Quantity Payment Adjustments," of the Standard Specifications shall apply only to major items of work as defined herein.

A major item of work is any bid item for which the cost, computed on the basis of contract unit price and the quantity shown in the proposal, is equal to or greater than ten (10) percent of the original total contract price. No adjustment will be made under Section 9-1.06 for a bid item that is not a major item of work.

Delete section 9-1.07, "PAYMENT FOR PRICE INDEX FLUCTUATIONS."

Add to 1st paragraph of section 9-1.16B:

If a schedule of values is not specified in the Special Provisions to be submitted or a payment breakdown is not provided in the payment clause of the applicable Standard Specifications or these Special Provisions,

progress payments for lump sum bid items will be a percentage of the lump sum bid item price based on the Engineer's determination of the amount of lump sum work already performed. At your option, submit a lump sum breakdown that provides sufficient detail for the Engineer to determine the value of work performed. The Engineer may consider but not exclusively base the determination of progress payments on your lump sum breakdown. The Engineer's determination of progress payments for lump sum bid items under the Contract will be final in accordance with Section 5-1.03 of the Standard Specifications.

Replace section 9-1.16D with:

9-1.16D Mobilization

Mobilization is eligible for partial payments if the Contract includes a bid item for mobilization. If the Contract does not include a mobilization bid item, mobilization is included in the payment for the various bid items. Mobilization is defined in Public Contract Code § 10104 and the Department will make partial payments under Public Contract Code § 10264.

Replace the 2nd paragraph of section 9-1.16E(4) with:

Stop notice information may be obtained at the office of the Engineer, 22 Orinda Way, Orinda, CA 94563.

Replace section 9-1.16F with:

9-1.16F Retentions

The City shall retain 5 percent of the estimated value of the work done and 5 percent of the value of materials so estimated to have been furnished and delivered and unused or furnished and stored as aforesaid as part security for your fulfillment of the contract.

At any time after 50 percent of the work is completed, you may request that the City Council find that satisfactory progress is being made and the City may make any of the remaining progress payments in full for actual work completed. The reduction will only be made upon the written request of the Contractor and shall be approved in writing by the surety on the Performance Bond and by the Surety on the Labor and Material Bond. The approval of the surety shall be submitted to the Disbursing Officer of the department; the signature of the person executing the approval of the surety shall be properly acknowledged and the power of attorney authorizing the person to give that consent must either accompany the document or be on file with the Department.

Pursuant to Public Contract Code 7107(c), the City will release retained funds within 60 days of completion of work.

Accordingly, it is your responsibility, under Section 5-1.13A of the Standard Specifications, to release retention held from your subcontractors pursuant to these Special Provisions.

You may request the City to make payment of funds withheld to ensure performance under this Contract if you comply with the requirements of Public Contract Code Section 22300. In lieu of retention, you may deposit in escrow into the City treasury or with a bank acceptable to the County, securities eligible for the investment of funds under Government Code Section 16430 or bank or savings and loan certificates of deposit, upon the following conditions:

- A. You will bear the expense placed upon the City and the escrow agent, either the City Finance Department or the bank, in connection with the escrow deposit made.
- B. Securities or certificates of deposit to be placed in escrow shall be of a value at least equivalent to the amounts withheld as specified within the contract agreement. Securities shall be valued by the City Director of Finance, whose decision shall be final.
- C. You shall enter into an escrow agreement substantially similar to the form set forth in Section 22300 of the Public Contract Code, except the form will include provisions governing inter alia any decrease in the value of securities on deposit. The form will be furnished by the City, upon your written request.
- D. You shall obtain the written consent of the surety to such agreement.
- E. If the securities are not listed as eligible under Government Code 16430, you shall obtain approval of the securities by the City Director of Finance before bid opening.

Replace section 9-1.17B with:

Submit a final invoice upon completion of the Work and satisfaction of all conditions of the Contract. The final invoice shall list amounts retained under the provisions of the Contract. The City will execute a last progress payment form and make a last monthly payment consistent with payment terms in "Partial Payments" pending final payment of retained funds. Prior estimates and payments shall be subject to correction in the last progress payment form.

Replace the 2nd paragraph of section 9-1.17C with:

Submit either a written acceptance of the proposed final estimate or a claim statement postmarked or hand delivered before the end of ninth business day after receiving the proposed final estimate.

Delete the 3rd paragraph of section 9-1.17C.

Replace section 9-1.17D(1) with:

If you accept the proposed final estimate or do not submit a claim statement within 9 business days of receiving the estimate, the Engineer furnishes the final estimate to you. Payment of this final estimate is conclusive except as specified in sections 5-1.27, 6-3.06, and 9-1.21.

If you submit a claim statement within 9 business days of receiving the Engineer's proposed final estimate, the Engineer furnishes a semifinal estimate to the Contractor. Payment of the semifinal estimate is conclusive as to the amount of work completed in the amount payable except as affected by the claims or as specified in sections 5-1.27, 6-3.06, and 9-1.21.

Payment by the City of the final undisputed amount due under the Contract, including payment based upon adjustments for any work done in accordance with any alterations of the Contract Documents, shall be contingent upon the Contractor furnishing the City with a release of all claims against the City arising by virtue of the Contract related to those amounts. In the event the Contractor has any such claims, such

claims in stated amounts may be specifically excluded by the Contractor from the release, in which case the payment by the City may be of only undisputed amounts.

Upon acceptance of the Work by the City, the City will make a final payment of the retained funds at a time of its choosing consistent with state prompt payment law requirements. When the City records a notice of completion of the entire work, it will make a final payment of the retained funds thirty-five calendar days after the notice of completion is recorded. The City will withhold from such final payment any funds required or allowed by the law, including, but not limited to Public Contract Code section 7107 and Civil Code section 3186.

No certificate given or payments made under the Contract, except the final certificate or final payment, shall be conclusive evidence of the performance of the Contract, either wholly or in part, against any claim of the City, and no payments shall be construed to be acceptance of any defective work or improper materials.

Add to section 9-1.17D(2)(a):

Comply with the provisions of Government Code Sections 900 and these specifications concerning the procedures to be followed when filing claims against the City. All claims shall be filed with the City Clerk. Forms specifying the information to be contained in claims against the Agency is specified with these special provisions, standard specifications, and applicable Government and Public Contract Codes.

Replace the 1st sentence of the 5th paragraph of 9-1.17D(3) with:

After the determination, the Engineer furnishes a final estimate to the Contractor and the Department pays the amount due 35 calendar days after the notice of completion is recorded.

Replace the 6th paragraph of 9-1.17D(3) with:

The Contractor's failure to comply with the claim procedures waives the claim.

Replace section 9-1.22 with:

9-1.22 RESOLUTION OF CONSTRUCTION CLAIMS

Pursuant to Public Contract Code Section 20104(a), all claims by Contractor of \$375,000 or less are subject to Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3 of the Public Contract Code, which is incorporated into the contract. In summary, this Article provides that all claims for time extension, or payment of money or damages shall be in writing and filed with the agency, along with all necessary documentation, on or before the date of final payment. The agency shall respond within 45 days of receipt for claims less than \$50,000. The claimant disputes the response, it may notify the agency within 15 days and demand an informal conference. If, after the conference, any portion remains in dispute, the claiming may file a claim as provided in Government Code section 900 et seq. Civil actions will be submitted to nonbinding mediation unless waived by both parties, and shall be submitted to judicial arbitration. Any party who after receiving an arbitration award requests a trial de novo but does not obtain a more favorable judgment shall pay the attorney's fees of the other party arising out of the trial. No local agency shall fail to pay money as to any portion of a claim

IV. SPECIAL PROVISIONS

1. Qualifications

The Contractor submitting a cost proposal for this work shall be experienced in landscape construction and maintenance and be prepared to furnish a list of at least five separate references if requested. The Contractor shall possess a State of California Contractors License Class A or C-27 at the time this contract is awarded.

2. Construction Area Signs

Sign post embedment must be 2.5 feet and backfill with native material. Compact by tamping.

Contractor must notify and obtain approval of the proposed construction area signs location from the Engineer/Inspector.

Contractor must set up all construction area signs two days in advance to notify approaching traffic on Camino Pablo prior to begin construction of the median landscape work. Signs must be inspected and approved by the Engineer/or Inspector.

PAYMENT:

Construction area signs will be made in increments of the contract lump sum price for this item of work in the following manner:

Initial Increment: 60% of the lump sum price upon satisfactory completion of installation of signs.

Final Increment: Balance of the lump sum price upon satisfactory completion of removal of signs.

3. Water Pollution Control Plans

In Appendix, Project Specifications Section 31-10-00 Clearing and Grubbing, Part 3.2, Temporary Erosion and Sedimentation Control describes contractor responsibility to prevent sand, silt materials, and contaminated fluid from draining into public storm drain systems. Contractor is required to submit a proposed Water Pollution Control Plan (WPCP) to the Engineer/Inspector for review and approval. Contractor must implement the approved erosion and sedimentation control measures prior to beginning any construction work.

PAYMENT:

WPCP is included in the lump sum price paid for as Water Pollution Control.

4. Temporary Lane Closure and Time Restriction

During commute hours (Mon-Fri: 6:00 a.m. to 9:00 a.m. and 3:00 p.m. to 7:00 p.m.), the contractor may close the lane adjacent to median curb in the non-commute direction of travel. Contractor can close lanes on both sides of the median curbs from 9:00 a.m. to 3:00 p.m., Monday through Saturday. If conditions allow, the Engineer/or Inspector may allow the contractor to adjust the lane closure hours according to traffic flow conditions.

5. Maintaining Traffic

In order to maintain traffic through the active construction work zones, the contractor must notify the local authorities at least 5 work days before the start of work. Cooperate with the local authorities to handle traffic through the work area and to make arrangements to keep the work area clear of parked vehicles.

Local authorities are defined as, but not limited to, City of Orinda Police Department, Moraga-Orinda Fire Department, United States Post Office, local waste management companies, local transit agencies, Emergency Response Companies and/or all businesses or regular users whose ability to perform their daily job will be affected by lane closures, detours or general work by the Contractor.

No construction equipment or construction materials shall be parked or stockpiled within 10 feet of a traffic lane along Camino Pablo when construction operations are not actively in progress.

A minimum of 1 paved traffic lane not less than 11 feet wide must be open at all times for use by traffic in each direction of travel.

Personal vehicles of your employee must not be parked on the travel way or sections closed to the traffic.

Lane closures are included in the lump sum price for Traffic Control System.

a. Flagger Costs

Flagging is paid for as traffic control system.

b. Traffic Control Plan

Prior to any proposed work in the median, or performing a temporary lane closure on Camino Pablo, the Contractor must submit a proposed traffic control plan to the Engineer/Inspector for review and approval. All proposed traffic control work must conform to 2010 California MUTCD–Part 6, “Temporary Traffic Control” to ensure safe flow of traffic and safety of workers in traffic zones.

6. Schedule of Values

Contractor must submit a schedule of Values for lump sum bid item “Irrigation Installation and Testing”. Contractor shall determine the quantities required to complete work and testing. Submit the material list with quantities as part of the schedule of values in order to determine the progress payment estimates.

Do not include costs for traffic control system in the schedule of values.

7. Staging Area

A Staging Area is available in existing City owned right of way along southbound Camino Pablo at Santa Maria Way, just north of the onramp to westbound Highway 24 as shown on final plans. Contractor can temporary use this strip of land for staging purposes during construction of the project. Contractor must adhere to the following conditions in order for City to grant you permission to occupy the area:

- a. Contractor must maintain a minimum of 25 feet lateral clearance on both sides of EBMUD steel gate entrance at all times.
- b. Contractor must take pictures of the staging area prior to construction with the Engineer/Inspector to document the pre-project condition of the area. If the Engineer

determines there is any damage in staging area, you will be responsible for all the costs to restore the area to its pre-project condition.

- c. Contractor must notify Public, parked cars or trucks, by posting notice on racks regarding temporary closure of the parking area during construction of the median landscape project. Posted parking signs must be covered and tape down with dark color plastic bags.
- d. Contractor must contact local authorities regarding temporary closure of the parking area during construction of the medians landscape project.

8. Stockpile Area

Stockpile area is not available within the project limits. If contractor wish to use existing median for temporary storage, you must notify the Engineer/Inspector and request for their approval.

9. Pre-Construction Meeting

A pre-construction meeting shall be scheduled a minimum of five (5) working days prior to the start of construction. City personnel will discuss general construction practice, RFI and invoice submittal, job site safety and other relevant topics.

Contractor must submit the flowing documents at the pre-construction meeting:

- a. Water Pollution Control Plan
- b. Temporary Traffic Control Plan for Lane Closure
- c. Schedule of Values for bid item “Irrigation Installation and Testing”, including material list and quantities break down
- d. Construction schedule showing work sequence to complete entire project within the allowable working days
- e. Contractor field and office responsible person name and phone number
- f. Material supplier’s notifications and certificates that are required in the Project Specifications

10. Project Plans and Specifications

Project plans titled “Camino Pablo Medians Landscape Improvements”, sheets L0.1, L0.2, L0.3, L1.1, L2.1, L2.2, L2.3, L2.4, L3.1, and L4.1, are attached in the Appendix. This project includes median landscape work associated with the landscape renovation and improvement of Median A, B, C & D located along Camino Pablo between Miner Road and Santa Maria Way.

Specific landscape project specifications, Sections 31-10-00 Clearing and Grubbing, 32-84-00 Planting Irrigation, 32-91-00 Planting Preparation, 32-90-00 Planting, and 32-93-00 Landscape Maintenance are included in the Appendix.

11. Daily and End of Project Clean-up

At the end of each workday, contractor must keep the work area clean from garbage such as soda cans, paper/or plastic products, debris and construction waste materials. All collected waste and debris shall be hauled off site for proper disposal. At the end of the project, contractor shall collect, remove and dispose of all construction debris and trash from the site at the end of the last project working day.

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CITY OF ORINDA
Camino Pablo Medians Landscape Improvements

City Project No.: 4136

Part I: Price Proposal

All prices shall include direct labor and overhead, equipment, materials, tools, fuel, and incidental costs.

No.	Item Description	Unit	Est. Quantity	Unit Price	Total Price
1	Mobilization	LS	1	\$	\$
2	Water Pollution Control	LS	1	\$	\$
3	Construction Area Signs	LS	1	\$	\$
4	Traffic Control System	LS	1	\$	\$
5	Clearing and Grubbing	LS	1	\$	\$
6	Soil Amending and Fine Grading	SF	9,220	\$	\$
7	Boulder Installation Type A	EA	17	\$	\$
8	Boulder Installation Type B	EA	22	\$	\$
9	Boulder installation Type C	EA	27	\$	\$
10	Irrigation Installation and Testing (Schedule of Values)	LS	1	\$	\$
11	Tree Installation	EA	28	\$	\$
12	Shrub Installation	EA	235	\$	\$
13	Mulch	SF	9,220	\$	\$
14	Maintenance, 60 Days	DAYS	60	\$	\$

TOTAL PROJECT PRICE PROPOSAL \$ _____

The quantities are estimates only, being given as a basis for comparison of price proposals. The City does not agree that the actual amount of work will corresponds therewith and the City is under no obligation to buy any amount of services. The City reserves the right to increase or decrease the amount of any item or portion of the work, or to omit portions of the work, as may be deemed necessary or advisable by the City. There shall be no allowance for anticipated profit on work that is deleted or decreased.

Part II: Bidder Acknowledgement/Signature

Company Name: _____

Contractor's License and DIR Number(s): _____

Address: _____

City and Zip: _____

Phone: _____

Bidder's Name and Official Title: _____

Authorized Signature: _____

[Signature must be notarized. Attach acknowledgement form.]

ACKNOWLEDGMENT OF ADDENDA: The undersigned Bidder acknowledges receipt of the following Addenda, which have been considered in preparation of this Bid.

No. _____	Dated: _____	No. _____	Dated: _____
No. _____	Dated: _____	No. _____	Dated: _____
No. _____	Dated: _____	No. _____	Dated: _____

Warning: If an addendum or addenda have been issued by the Agency and not noted above as being received by the bidder, this Proposal may be rejected as non-responsive.

Part III: Listing of Subcontracts

The following is a complete list of items to be subcontracted, including the subcontractor's name, license number, address, public works contractor registration number (i.e. D.I.R. #), as required. If a portion of any item of work is done by a subcontractor, the value of the work subcontracted will be based on the estimated cost of such portion of the contract item, determined from information submitted by the contractor, subject to approval by the engineer. City requires that all subcontractor information shall be submitted at the time of bid opening, no time extension will be allowed.

The Bidder shall list each subcontractor to whom the Bidder proposes to subcontract any item of work, or portion thereof, in excess of one-half of one percent (.50%) of the total bid OR in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent (.50%) of the total bid or \$10,000, whichever is greater in accordance with the Subletting and Subcontracting Fair Practices Act, commencing with Section 4100 of the Public Contract Code.

Business Name, License #, Address, DIR Registration #	Items or portions of items of work	Dollar amount of subcontracts

Part IV: Certifications

1. NONCOLLUSION DECLARATION TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

_____, the undersigned declares:
(Name)

I am the _____ of _____,
(Title, position in Company) (Name of Company)

the party making the foregoing bid. The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____[date] at _____
_____[City], _____[State].

(Signature of Bidder)

2. **Public Contract Code Section 10285.1 Statement**

In conformance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the bidder hereby declares under penalty of perjury under the laws of the State of California that the bidder has _____, has not _____ been convicted within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or Federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.

Note: The bidder must place a check mark after "has" or "has not" in one of the blank spaces provided. The above Statement is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

3. **Public Contract Code Section 10162 Questionnaire**

In conformance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury, the following questionnaire:

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation?

Yes _____ No _____

If the answer is yes, explain the circumstances in the following space.

4. **Public Contract Code 10232 Statement**

In conformance with Public Contract Code Section 10232, the Contractor, hereby states under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two year period because of the Contractor's failure to comply with an order of a federal court which orders the Contractor to comply with an order of the National Labor Relations Board.

Note: The above Statements and Questionnaire are part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement and Questionnaire. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

APPENDIX

CITY OF ORINDA
CONSTRUCTION CONTRACT
for

Project Name and Contract No.

THIS CONTRACT FOR CONSTRUCTION is made and entered into the date of the last signature affixed hereto by and between the City of Orinda, a municipal corporation (herein called the City) and _____, a _____ located at _____, (herein called Contractor).

RECITALS

- A. WHEREAS, the City has caused to be prepared in the manner prescribed by law, certain plans, specifications and other contract documents for the public work of construction titled _____ herein described and shown, and has approved and adopted the Contract Documents, as that term is defined below, including the specifications and plans, and has caused to be published in the manner and for the time required by law a Notice Inviting Bids for the work described in the Contract Documents (the Work), and
- B. WHEREAS, Contractor in response to the City's Notice has submitted to the City a sealed bid proposal accompanied by a bid guaranty in an amount not less than ten percent (10%) of the amount bid for the construction of all of the proposed Work in accordance with the terms of the Contract Documents, and
- C. WHEREAS, the City, in the manner prescribed by law, has publicly opened, examined, and declared the bids submitted and as a result has determined and declared Contractor to be the lowest responsible bidder and has duly awarded to Contractor a contract for all of the Work and for the sum or sums named in the bid proposal and in this Contract.

Accordingly, the City and Contractor agree as follows:

1. **CONTRACT SUM:** The City agrees to pay, and Contractor agrees to accept, in full payment for the above Work, the sum of _____ dollars (\$ _____) to be paid in accordance with the Contract Documents.
2. **COMPLIANCE WITH LAW:** The City is a public agency. All provisions of law applicable to public contracts are a part of this Contract to the same extent as though set forth herein and will be complied with by Contractor. This Contract is subject to State contract nondiscrimination and compliance requirements pursuant to Government Code section 12990.
3. **CONTRACT DOCUMENTS:** The following Contract Documents relating to this Contract for Construction are hereby made a part of and incorporated by reference into this Contract:

- I. Notice to Bidders and Special Provisions
 - A. Engineering Plans/Drawings and Specifications prepared for this Project.
 - B. State of California Dept. of Transportation, 2010 Standard Specifications
 - C. State of California Dept. of Transportation, Revised Standard Specifications attached to the Special Provisions
 - D. Special Provisions
 - E. State of California Dept. of Transportation, 2010 Standard Plans
 - F. State of California Dept. of Transportation, Revised Standard Plans listed in the Standard Plan List and attached to the Special Provisions
 - G. Any Supplemental Contract Information

- II. Proposal & Sample Contract
 - A. List of Subcontractors
 - B. Non-Collusion Declaration
 - C. Public Contract Code Section 10162 Questionnaire
 - D. Public Contract Section 10232 Statement
 - E. Public Contract Code Section 102851.1 Statement
 - F. Bidder's Bond

Including the following for federally funded projects:

- G. Equal Employment Opportunity Certification
- H. General Prevailing Wage Rates (State of California)
- I. Debarment and Suspension Certificate
- J. Nonlobbying Certification
- K. Disclosure of Lobbying Activities
- L. DBE Commitment/DBE Good Faith Effort Documentation
- M. Davis-Bacon Act Federal Minimum Wage Rates

- III. Construction Contract
 - A. Compliance with Insurance Requirements declaration (Exhibit A)
 - B. Performance Bond (Exhibit B)
 - C. Labor and Material Bond (Exhibit C)
 - D. Warranty and Guaranty (Exhibit D)
 - E. Affidavit Concerning Conflicts of Interest and Noncompetitive Practices (Exhibit E)
 - F. Certificates of Insurance, Endorsements, and other evidence of insurance provided pursuant to this Contract and accepted by the City (Exhibit F)
 - G. Contractor Safety Program: Self-Certification Worksheet (Exhibit G)

Any work called for in one Contract Document not mentioned in another is to be performed and executed the same as if mentioned in all Contract Documents.

- 4. **EFFECTIVE DATE:** This Contract shall not be effective and no payments to Contractor will be made until:
 - a. The City has received satisfactory evidence that Contractor has met all of the insurance requirements of this Contract;

b. All required signatures, including those of the City Manager, the City Attorney, and the City Clerk have been obtained; and

c. All bonds required by this Contract have been obtained and filed with the City.

- 5. INDEMNIFICATION:** The City of Orinda and all officers, employees, and agents thereof connected with the Work, shall not be answerable or accountable in any manner: for any loss or damage that may happen to the Work or any part thereof; for any loss or damage to any of the materials or other things used or employed in performing the Work; for injury to or death of any person; or for damage to property from any cause except losses due to sole or active negligence of the City's officers or employees.

To the fullest extent allowed by law, Contractor shall defend, indemnify and hold harmless the City, its elected and appointed officials, employees and agents, from all liability, penalties, costs, losses, damages, expenses, causes of action, claims or judgments, including attorneys' fees and other defense costs, resulting from injury to or death sustained by any person (including Contractor's employees and subcontractors), or damage to property of any kind, or any other injury or damage whatsoever, which injury, death or damage arises out of or is in any way connected with the performance of the Work, regardless of Contractor's fault or negligence, including any of the same resulting from City's alleged or actual negligent act or omission, or its agents, contractors or employees; except that said indemnity shall not be applicable to injury, death or damage to property arising from the sole or active negligence or willful misconduct of City, its constituent entities, its and their officers, agents, or servants who are directly responsible to City. In instances where the City's active negligence accounts for only a percentage of the liability involved, the obligation of Contractor will be for that entire portion of percentage of liability not attributable to the active negligence of the City.

Contractor shall be obligated to immediately defend, with counsel approved by the City, any suit or action brought against the City, its elected and appointed officials, employees and agents, founded upon any claim of injury to or death sustained by any person (including Contractor's employees and subcontractors), or damage to property of any kind, or any other injury or damage whatsoever, which injury, death or damage arises out of or is in any way connected with the performance of the Work, whether or not liability is established. If it is finally adjudicated that liability was caused by the sole active negligence or sole willful misconduct of an indemnified party, Contractor may submit a claim to the City for reimbursement of reasonable attorneys' fees and defense costs. This indemnification and duty to defend shall extend to claims asserted after termination of this Contract for whatever reason.

In addition to any remedy authorized by law, as much of the money due Contractor under and by virtue of this Contract as shall be considered necessary by the City, may be retained by the City until disposition has been made of such suits or claims for damage.

The City and Contractor shall timely notify each other of the receipt of any third-party claim relating to the contract. The City shall be entitled to recover its reasonable costs incurred in providing such notification.

6. INSURANCE TYPES AND LIMITS: Contractor shall promptly obtain, at its own expense, all the insurance described in this section, and submit coverage verification for review and approval by the City. This insurance shall be in addition to any other form of insurance or bonds required under the terms of this Contract.

To the extent that Contractor's insurance documentation is not in compliance with the requirements of this Contract and the City Attorney is required to intervene to explain and obtain the proper documentation from Contractor's insurer, the cost of the City Attorney's services will be deducted from the contract price to which Contractor would otherwise be entitled under the terms of this Contract.

Contractor shall include all costs for all insurance in its bid.

Nothing contained in these insurance requirements is to be construed as limiting the extent of Contractor's responsibility for payment of damages resulting from its operations under this Contract. Contractor's failure to provide or maintain the insurance required by this Contract shall not affect Contractor's obligations under this Contract.

Contractor, at Contractor's own expense, shall procure, pay for, and maintain throughout the duration of this Contract the following insurance coverage against claims for injuries to persons or damages to property that may arise from or in connection with the performance of the Work hereunder by Contractor, its agents, representatives, employees or subcontractors.

Companies writing the insurance under this article shall be authorized to do business in the State of California. Insurance is to be placed with insurers possessing an A.M. Best rating of no less than A:VII.

- a. **Workers' Compensation Coverage.** Contractor shall maintain workers' compensation insurance and employer's liability insurance for Contractor's employees in accordance with Sections 3700 *et seq.* of the California Labor Code. In addition, Contractor shall require each subcontractor involved with the Work to be performed under this Contract to similarly maintain workers' compensation insurance and employer's liability insurance for all of subcontractor's employees in accordance with Sections 3700 *et seq.* of the California Labor Code. The workers' compensation policy shall include employers' liability in an amount not less than \$1,000,000 for each accident, bodily injury by disease, and \$1,000,000 for each employee bodily injury by disease. The workers' compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all Work performed by Contractor, its employees, agents and subcontractors.
- b. **General Liability Coverage.** Contractor shall maintain commercial general liability insurance and umbrella or excess liability insurance covering all operations by or on behalf of Contractor providing insurance for bodily injury liability and property damage liability for the following limits per occurrence and including coverage for: (1) premises, operations and mobile equipment; (2) products and completed operations; (3) broad form property damage (including completed operations); (4)

explosion, collapse, and underground hazards; (5) personal and advertising injury; and (6) contractual liability.

Liability Limits

Total bid	For each occurrence ^a	Aggregate for products/ completed operation	General aggregate ^b	Umbrella or excess liability ^c
≤ \$1,000,000	\$1,000,000	\$2,000,000	\$2,000,000	\$5,000,000
> \$1,000,000				
≤ \$2,000,000	\$2,000,000	\$4,000,000	\$4,000,000	\$5,000,000
> \$2,000,000				
≤ \$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$10,000,000
> \$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$15,000,000

^a Combined single limit for bodily injury and property damage.

^b This limit must apply separately to your work under this Contract.

^c The umbrella or excess policy must contain a clause stating that it takes effect (drops down) in the event the primary limits are impaired or exhausted.

If Contractor maintains higher limits than the minimums shown above, the City requires and shall be entitled to coverage for the higher limits maintained by Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

- c. Automobile Liability Coverage. Contractor shall maintain automobile liability insurance in amounts not less than \$1,000,000 per occurrence for bodily injury and property damage for all activities arising out of or in connection with the Work to be performed under this Contract. All automobiles and trucks owned, non-owned or hired shall be covered.
- d. Builder's Risk (Course of Construction) Coverage. Contractor shall maintain builder's risk (Course of Construction) insurance covering all risks of loss in the amount not less than the completed value of the project with no coinsurance penalty provisions. The City shall be named as a loss payee in the builder's risk policy.

7. ADDITIONAL INSURANCE REQUIREMENTS:

- a. The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:
 - i. Additional Insureds. The City and its officers, officials, employees, agents, volunteers, and those individuals identified in section 7-1.06D(2) of the special provisions shall be covered as additional insureds with respect to liability arising out of work or operations performed by or on behalf of Contractor, including

materials, parts or equipment furnished in connection with such work or operations and automobiles owned, leased, hired, or borrowed by or on behalf of Contractor. General liability coverage can be provided in the form of an endorsement to Contractor's insurance (at least as broad as ISO Form CG 20 10, CG 11 85, or both CG 20 10 and CG 20 37 forms if later revisions used), or as a separate owner's policy. Forms covering additional insureds only for liability caused in whole or part by Contractor's acts or omissions are NOT acceptable.

- ii. Contractor's Policy Primary. For any claims related to the Work, Contractor's policy shall be considered primary insurance as to the City, its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, or volunteers, shall be excess of Contractor's insurance only and shall not contribute with it.
- b. Period of Effect. All insurance required by this Contract shall remain in full force and effect at all times during the prosecution of the Work and until the final completion and acceptance thereof. In addition, the general liability coverage shall be maintained for a minimum of five (5) years after final completion and acceptance of the Work. In the event Contractor fails to obtain or maintain completed operations coverage as required by this Contract, the City at its sole discretion may purchase the coverage as required and the cost will be paid by Contractor. The Notice to Proceed does not relieve Contractor of the duty to obtain such insurance as required herein.
- c. Notice. Contractor shall not cancel, assign, or change any policy of insurance required by this Contract or engage in any act or omission that will cause its insurer to cancel any insurance policy required by this Contract except after providing 30 days prior written notice to the City. If an insurance policy required by this Contract is unilaterally cancelled or changed by the insurer, the Contractor shall immediately provide written notice to the City and obtain substitute insurance meeting the requirements of this Contract. Each insurance policy required by this Contract shall provide that coverage shall not be canceled, except with notice to the City. Nothing in this subsection relieves Contractor of its obligation to maintain all insurance required by this Contract at all times during the prosecution of the Work.
- d. Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officers, officials, employees, agents and volunteers; or (2) Contractor shall provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration and defense expenses.
- e. No insurance policy required herein shall be written as claims-made coverage. Insurance must be written on an occurrence basis.
- f. Failure of the City to enforce in a timely manner any of the provisions of this Contract, including the Contract's insurance provisions, shall not act as a waiver to enforcement of any of these provisions at a later date. The City reserves the right to require complete,

certified copies of all required insurance policies, including endorsements, required by these provisions, at any time.

- g. Subcontractors. Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein.
 - h. Contractor hereby agrees to waive rights of subrogation that any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation.
 - i. City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.
8. **EVIDENCE OF INSURANCE:** Contractor shall provide (1) certificates of insurance and (2) original written endorsements as evidence of the insurance coverage required by this Contract. The endorsements are to be signed by a person authorized by that Insurer to bind coverage on its behalf. Certificates and endorsements shall be filed with the City and are considered an integral part of this Contract, which shall not become effective until satisfactory evidence of insurance has been received and approved by the City. However, failure of Contractor to provide satisfactory evidence of insurance or failure of the City to approve satisfactory evidence of insurance shall not operate as a waiver of these insurance requirements. As noted above, the endorsements of insurance coverage shall specifically:
- a. Endorse the City, its officers, officials, employees, agents and volunteers, and those individuals identified in section 7-1.06D(2) of the special provisions, as additional insureds for general liability coverage and automobile liability coverage;
 - b. Provide that Contractor's insurance is primary as to the City's coverage, which shall be non-contributory for general liability coverage and automobile liability coverage;
 - c. Provide that the City is named as a loss payee for the builder's risk (course of construction) coverage; and
 - d. Provide that Contractor waives rights of subrogation in favor of the City for all work performed by Contractor, its employees, agents and subcontractors for the workers' compensation coverage.
 - e. Provide that coverage shall not be canceled, except with notice to the City.
9. **WORKERS COMPENSATION CERTIFICATION:** By signing this Agreement, Contractor certifies the following "I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions before commencing the performance of the work of this contract."
10. **PROHIBITED INTEREST:** Contractor represents that to the best of its knowledge no officer or employee of the City has any financial interest in this transaction or in the business of Contractor; has used his or her position considering or approving the Contract for private

gain or advantage; or has received any money or other consideration for approval of this Contract. Contractor further represents that to the best of its knowledge no officer or employee of the City is engaged in any employment, activity, or enterprise for compensation which is inconsistent, incompatible, in conflict with, or inimical to his or her duties in approving this Contract. If any such interest, employment, activity, or enterprise comes to the knowledge of Contractor at any time, a full and complete disclosure of all such information shall be made in writing to the City, even if such interest would not be considered a conflict of interest under Article IV Division 4 Section 1090 or section 1126 of the Government Code of the State of California. No officer, or employee of the City or of any of its member jurisdictions during his/her tenure of office, or for one year thereafter, shall have any interest, financial or otherwise, in this Contract or the proceeds therefrom.

11. **NOTICES:** Any notices to be given hereunder by either party to the other may be effected either by personal delivery, fax or mail. Mail shall be sent registered or certified, postage pre-paid, return receipt requested. Mailed notices shall be addressed to the parties at the addresses set forth below, but each party may change its address by written notice in accordance with this paragraph. Notices delivered personally shall be effective immediately. Notices sent by mail shall be effective one (1) day after mailing. Notices sent by facsimile shall be effective upon transmission to the number set forth below.

CITY OF ORINDA

Director of _____
City of Orinda
22 Orinda Way
Orinda, California 94563
Fax: _____

CONTRACTOR

11. **BONDS:**

- a. **Performance Bond:** A performance bond as shown in Exhibit B shall be provided in the amount of 100% of the contract price.
- b. **Labor and Materials:** A labor and materials bond as shown in Exhibit C shall be provided in the amount of 100% of the contract price.
- c. **Proof of Admitted Surety Insurer Status.** A certificate of admitted surety insurer status shall be attached to each bond. Proof of that status shall be in either of the following forms: (a) a printout of information from the website of the Department of Insurance confirming the surety is an admitted surety insurer or (b) the Contra Costa County Clerk's certificate under Code of Civil Procedure section 995.640(a).

12. **CONTRACTOR'S BOOKS AND RECORDS:** Contractor and its subcontractors shall establish and maintain records pertaining to this Contract. Contractor's and subcontractors' accounting systems shall conform to generally accepted accounting principles and all records shall provide a breakdown of total costs charged under this contract, including properly executed payrolls, time records, invoices and vouchers.

Contractor shall maintain any and all ledgers, books of account, invoices, vouchers, canceled checks and other records or documents evidencing or relating to charges for services or expenditures and disbursements charged to the City for a minimum period of three (3) years, or for any longer period required by law, from the date of final payment to Contractor under this Contract.

Contractor shall maintain all documents and records that demonstrate performance under this Contract for a minimum period of three (3) years, or for any longer period required by law, from the date of termination or completion of this Contract.

Any records, data or documents required to be maintained pursuant to this Contract shall be made available for inspection, copying or audit, at any time during regular business hours, upon written request by the City or a designated representative for the purpose of auditing and verifying statements, performance, invoices, or bills submitted by Contractor pursuant to this Contract and shall provide such assistance as may be reasonably required in the course of such inspection. Copies of such documents shall be provided to the City for inspection at City's facility when it is practical to do so. Otherwise, unless an alternative is mutually agreed upon, the records shall be available at Contractor's address indicated for receipt of notices in the Contract.

Where the City has reason to believe that such records or documents may be lost or discarded due to dissolution, disbandment or termination of Contractor's business, the City may, by written request, require that custody of the records be given to the City and that the records and documents be maintained at the City's facility. Access to such records and documents shall be granted to any party authorized by Contractor, Contractor's representatives, or Contractor's successor-in-interest.

Pursuant to California Government Code section 8546.7, the parties to this Contract may be subject to the examination and audit of representative of the Auditor General of the State of California for a period of three (3) years after final payment under the Contract. Any such examination and audit shall be confined to those matters connected with the performance of this Contract including, but not limited to, the cost of administering the Contract.

Contractor and all subcontractors shall furnish the records specified in California Labor Code section 1776 directly to the Labor Commissioner in accordance with law. Contractor shall post all job site notices that are required by regulations of the Department of Industrial Relations. The work performed pursuant to this Contract is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

13. **WARRANTY AND GUARANTY:** Contractor shall provide the City with a completed warranty and guaranty as shown in Exhibit D.
14. **CONFLICTS OF INTEREST AND NONCOMPETITIVE PRACTICES AFFIDAVIT:** Contractor shall provide the City with a completed affidavit concerning conflicts of interest and noncompetitive practices as shown in Exhibit E.

15. **FAITHFUL PERFORMANCE:** Contractor agrees to do all things necessary to faithfully perform and complete the Work.

16. **WARRANTIES:**

- a. Warranty of Title: Contractor warrants to the City and its successors and assigns that the title to the materials, supplies or equipment covered by this Contract, when delivered to the City or its successors or assigns, shall be free from all liens and encumbrances.
- b. Warranty of Fitness: Contractor warrants that all materials, supplies and products furnished meet the requirements and conditions of the Contract Documents and are fit for the purpose intended.
- c. Warranty of Merchantability: Contractor warrants that the goods are merchantable in accordance with California Commercial Code section 2314. In accepting this and other warranties and the materials or supplies to be manufactured or assembled pursuant to the Contract Documents, the City does not waive any warranty, either express or implied, in California Commercial Code sections 2312 through 2315, inclusive, or any liability of the manufacture as determined by any decision of a court of the State of California or the United States.
- d. Registration: Contractor represents and warrants that it and all subcontractors working under this Contract are registered and qualified to perform public work pursuant to section 1725.5 of the California Labor Code.

17. **WAIVER:** No waiver of any breach of the terms, conditions or covenants of this Contract shall be construed to be a waiver of any succeeding breach of the same or any other covenants, conditions or terms of this Contract.

18. **TIME OF THE ESSENCE:** Time is of the essence in this Contract.

19. **CONTROLLING LAW:** This Contract and all matters relating to it shall be governed by the laws of the State of California.

20. **ENTIRE AGREEMENT:** It is expressly agreed between the City and Contractor that this Contract, including the Contract Documents listed in paragraph 3 and incorporated herein, expresses the complete and integrated agreement between the parties and supersedes all prior oral or written negotiations, agreements and understandings between them regarding the subject matter hereof. There are no other terms and provisions, implied or otherwise, written or oral, respecting the subject of this Contract.

21. **AMENDMENT:** This Contract may be amended only by a written agreement signed by the parties.

22. **SPECIAL NOTICE:**

CONTRACTORS ARE REQUIRED BY LAW TO BE LICENSED AND REGULATED BY THE CONTRACTORS' STATE LICENSE BOARD WHICH HAS JURISDICTION

TO INVESTIGATE COMPLAINTS AGAINST CONTRACTORS IF A COMPLAINT REGARDING A PATENT ACT OR OMISSION IS FILED WITHIN FOUR (4) YEARS OF THE DATE OF THE ALLEGED VIOLATION. A COMPLAINT REGARDING A LATENT ACT OR OMISSION PERTAINING TO STRUCTURAL DEFECTS MUST BE FILED WITHIN TEN (10) YEARS OF THE DATE OF THE ALLEGED VIOLATION. ANY QUESTIONS CONCERNING A CONTRACTOR MAY BE REFERRED TO THE REGISTRAR, CONTRACTORS' STATE LICENSE BOARD, P.O. BOX 26000, SACRAMENTO, CALIFORNIA 95826.

This Contract is executed by the City upon approval by the Council at its regular meeting of _____.

CITY OF ORINDA

CONTRACTOR

By: _____

Steve Salomon
City Manager

By: _____

Print Name: _____

Title: _____

Authorized representative of Contractor

Signature must be notarized. Attach acknowledgement

Date: _____

Date: _____

Attest: _____

Sheri M. Smith
City Clerk

If Contractor is a corporation, affix corporate seal here

Approved as to Form:

Osa L. Wolff
City Attorney

Exhibits

- A. Compliance with Insurance Requirements declaration
- B. Performance Bond
- C. Labor and Material Bond
- D. Warranty and Guaranty
- E. Affidavit Concerning Conflicts of Interest and Noncompetitive Practices
- F. Insurance Documents To Be Provided by Contractor
 - i. Workers' Compensation Certificate of Insurance
 - ii. Workers' Compensation Insurance Endorsements
 - iii. Automobile Liability Certificate of Insurance
 - iv. Automobile Liability Insurance Endorsements
 - v. General Liability Certificate of Insurance
 - vi. General Liability Insurance Endorsements
 - vii. Builder's Risk (Course of Construction) Certificate of Insurance
 - viii. Builder's Risk (Course of Construction) Insurance Endorsements
- G. Contractor Safety Program – Self Certification Worksheet

EXHIBIT A

COMPLIANCE WITH INSURANCE REQUIREMENTS

To comply with this Contract, I, the undersigned, declare that I have provided certificates of insurance and original signed written endorsements (or other policy language) as evidence of the insurance coverage required by this Contract, which include the following.

A. Additional Insureds.

With respect to my general liability and automobile insurance coverage, I have attached to this Contract endorsements that add the City of Orinda, its officials, employees, agents, volunteers, and those individuals identified in section 7-1.06D of the special provisions as additional insureds. Acceptable additional insured endorsements for general liability insurance coverage include CG 10 10 11 85 or both CG 20 10 10 01 and CG 20 37 10 01.

B. Primary Insurance.

With respect to my general liability and automobile insurance coverage, I have attached to this Contract endorsements that demonstrate my insurance is primary as to the City's insurance for any claim arising out of the subject of this Contract. The endorsements expressly state that the City's insurance is excess insurance only and shall not be required to contribute to a loss that is covered by my insurance.

C. Builder's Risk.

With respect to my builder's risk (course of construction) insurance coverage, I have attached to this Contract an endorsement naming the City as a loss payee.

D. Waiver of Subrogation.

With respect to my workers compensation insurance coverage, I have attached to this Contract an endorsement with a waiver of subrogation in favor of the City for all Work performed by the Contractor, its employees, agents and subcontractors.

D. Notice of Cancellation.

With respect to all insurance policies, I have attached to this Contract endorsements providing that coverage shall not be canceled, except with notice to the City.

Alternatively, I have attached pages from my insurance contracts that provide satisfactory evidence that my policies cover these requirements without the need for an endorsement.

I, the undersigned, further declare that I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

Date: _____

CONTRACTOR NAME

CONTRACTOR SIGNATURE

[Signature must be notarized. Attach acknowledgement form.]

SIGNATORY'S TITLE/OFFICIAL CAPACITY

EXHIBIT B

PERFORMANCE BOND

Bond No: _____

Premium: _____

Contract No: _____

WHEREAS, the City of Orinda, State of California, and _____,
(Principal), have entered into a Contract in which Principal agrees to install and complete certain
designated public improvements described as _____,
_____, and;

WHEREAS, the Principal is required under the terms of the Contract for furnish a bond for faithful
performance of the Contract.

NOW, THEREFORE, we, the Principal and _____,
as corporate surety, are held and firmly bound unto the City of Orinda, (City), in the sum of _____
_____ dollars (\$_____)
lawful money of the United States, for the payment of which we bind ourselves, our heirs, successors,
executors and administrators, jointly and severally.

The condition of this obligation is such that if the above Principal, his/her or its heirs, executors,
administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and
perform the covenants, conditions and provisions in the Contract and any alteration thereof made as
therein provided, on this or their part, to be kept and performed at the time and in the manner therein
specified, and in all respects according to their true intent and meaning, it shall become null and void;
otherwise it shall be and remain in full force and effect.

As part of the obligation secured hereby and in addition to the face amount specified therefore, there shall
be included costs and reasonable expenses and fees, including reasonable attorneys' fees, incurred by City
in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the
terms of the Contract or to the Work to be performed thereunder or the specifications accompanying the
same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such
change, extension of time, alteration or addition of the terms of the Contract or to the Work or to the
specifications.

The surety is an "admitted surety insurer" as described in California Code of Civil Procedure §995.120. A
certificate of admitted surety insurer status is attached to this bond. Proof of that status shall be in either
of the following forms: (a) a printout of information from the website of the Department of Insurance
confirming the surety is an admitted surety insurer or (b) the Contra Costa County Clerk's certificate
under CCP§995.640(a).

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety above named, on _____, 20____.

Date: _____

Surety
[Signature must be notarized. Attach acknowledgement form.]

Date: _____

Contractor
[Signature must be notarized. Attach acknowledgement form.]

Title (Designated Official Capacity)

Note: Power of Attorney must be attached for signatory for surety. In addition, a certificate of admitted surety insurer status shall be attached.

NAME AND ADDRESS OF CONTRACTOR:

NAME AND ADDRESS OF SURETY:

EXHIBIT C

LABOR AND MATERIAL BOND

Bond No: _____

Premium: _____

Contract No: _____

WHEREAS, the City of Orinda, State of California, and _____,
(Principal), have entered into a Contract in which Principal agrees to install and complete certain
designated public improvements described as _____,
_____, and;

WHEREAS, under the terms of the Contract, Principal is required to file a good and sufficient payment
with the City of Orinda to secure the claims to which reference is made in Title 15 (commencing with
Section 3082) of Part 4 of Division 3 of the Civil Code of the State of California.

NOW, THEREFORE, the Principal and _____,
as corporate surety are held firmly bound unto the City of Orinda and all contractors, subcontractors,
laborers, materialmen and other persons employed in the performance of the Contract and referred to in
the above-mentioned Civil Code in the sum of _____
_____ dollars (\$ _____), for materials furnished or labor on the project of
any kind, or for amounts due under the Unemployment Insurance Act with respect to such work or labor,
that the surety will pay the same in an amount not exceeding the amount set forth above, and also in case
suit is brought upon this bond, will pay, in addition to the amount set forth above, costs and reasonable
expenses and fees, including reasonable attorneys' fees, incurred by City in successfully enforcing such
obligation, to be awarded and fixed by the court, and to be taxed as costs and to be included in the
judgment rendered.

THE CONDITION OF THIS OBLIGATION IS SUCH that:

1. If the Principal, its heirs, executors, administrators, successors, or assigns fail to pay for any
materials, provisions, or other supplies or teams used in, on, for, or about the performance of the work
contracted to be done, or for any work or labor on the project of any kind, as required by California Civil
Code section 3247 *et seq.*, and
2. If the Principal fails to pay (1) any of the persons named in Civil Code section 3181, (2) amounts
due under the Unemployment Insurance Code with respect to work or labor performed under the contract
or (3) for any amounts required to be deducted, withheld, and paid over to the Employment Development
Department from the wages of employees of contractor and subcontractors pursuant to section 13020 of
the Unemployment Insurance Code with respect to the work and labor, and
3. If those entitled to be paid (the persons, companies, or corporations furnishing the materials,
provisions or other supplies, teams, appliances or power to be used in, on, for, or about the performance
of the work contracted to be executed or performed, or any person contributing to said work to be done or
any person who performs work or labor on the project, or supplies both work and materials for the
project) have complied with California Civil Code section 3247 *et seq.*, then the Surety will pay the same
in or to any amount not exceeding one hundred percent (100%) of the Contract amount and also, in case
suit is brought on this bond, the Surety will pay such reasonable attorneys' fees and costs and expenses of
litigation as shall be fixed by the court, awarded and taxed as provided in California Civil Code section
3247 *et seq.*

This bond shall inure to the benefit of any of the persons and entities identified in Section 3181 so as to give a right of action to those persons or their assigns in any suit brought on the bond.

Should the conditions of this bond be fully performed, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect.

The surety stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract shall in any manner affect its obligations on this bond, and it waives notice of any such change, extension, alternation or addition.

The surety is an "admitted surety insurer" as described in California Code of Civil Procedure §995.120. A certificate of admitted surety insurer status is attached to this bond. Proof of that status shall be in either of the following forms: (a) a printout of information from the website of the Department of Insurance confirming the surety is an admitted surety insurer or (b) the Contra Costa County Clerk's certificate under CCP §995.640(a).

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety above named, on _____, 20____.

Date: _____

Surety
[Signature must be notarized. Attach acknowledgement form.]

Date: _____

Contractor
[Signature must be notarized. Attach acknowledgement form.]

Title (Designated Official Capacity)

Note: Power of Attorney must be attached for signatory for surety. In addition, a certificate of admitted surety insurer status shall be attached.

NAME AND ADDRESS OF CONTRACTOR:

NAME AND ADDRESS OF SURETY:

EXHIBIT D

WARRANTY AND GUARANTY

To the CITY OF ORINDA,

Contractor hereby warrants and guarantees for one (1) year from and after the date of completion of the services provided for in this Contract that said materials and labor necessary for the _____

_____ shall operate as provided for in the Contract Documents. During the term of this warranty, Contractor shall provide all materials, parts and labor, at its own expense, which are necessary to repair and/or correct any and all defects, installation or operational failures in the equipment from any cause. Notwithstanding the foregoing, Contractor shall not be required to bear the expense of correction of any failure in the equipment that is caused by the sole or active negligence or willful misconduct of the City. The warranties of each part or component supplied are in addition to the warranties required of Contractor in other Contract Documents.

Should any of the work prove defective, due to faulty workmanship, materials furnished or methods of installation, or should the work or any part thereof fail to operate properly as originally intended and in accordance with the plans and specifications, due to any of the above causes, or if any work performed under this Contract fails to fulfill any of the requirements of the Contract Documents, all within one year after date on which the Work is accepted by the City, or after relief from maintenance, whichever is latest, the undersigned agrees to without delay and without any cost to the City to repair, replace or reconstruct any defective or otherwise unsatisfactory part or parts of the Work so that said Work will function successfully as originally contemplated. Should Contractor fail to act promptly or in accordance with this requirement, or should the situation require that repairs or replacements be made before Contractor can be notified, the City may, at its option, make the necessary repairs or replacements or perform the necessary work and Contractor shall pay to the City the actual cost of such repairs. Contractor shall also pay to the City any attorneys' fees incurred to enforce this guaranty.

Date: _____

CONTRACTOR NAME

CONTRACTOR SIGNATURE

[Signature must be notarized. Attach acknowledgement form.]

SIGNATORY'S TITLE/OFFICIAL CAPACITY

EXHIBIT E

AFFIDAVIT CONCERNING CONFLICTS OF INTEREST AND NONCOMPETITIVE PRACTICES

A. Conflict of Interest. That Contractor, by entering into this Contract with the City to perform or provide work, services or materials to the City, has thereby covenanted, and by this affidavit does again covenant and assure that it has no direct or indirect pecuniary or proprietary interest, and that it shall not acquire any such interest, that conflicts in any manner or degree with the services required to be performed under this Contract and that it shall not employ any person or agent having any such interest. In the event that Contractor or its agents, employees or representative hereafter acquires such a conflict of interest, it shall immediately disclose such interest to the City and take action immediately to eliminate the conflict or to withdraw from this Contract, as the City may require.

B. Contingent Fees and Gratuities. That Contractor, by entering into this Contract with the City to perform or provide services or material for the City, has thereby covenanted, and by this affidavit does again covenant and assure:

1. That no person or selling agency except bona fide employees or designated agents or representative of Contractor has been employed or retained to solicit or secure this Contract with an agreement or understanding that a commission, percentage, brokerage or contingent fee would be paid;
2. That no gratuities, in the form of entertainment, gifts or other, were offered or given by Contractor or any of its agents, employees or representatives, to any official or employee of the City or other governmental agency with a view toward securing this Contract or securing favorable treatment with respect to the awarding or amending, or the making of any determination with respect to the performance of this Contract; and
3. That no contracts of communication or lobbying efforts were made by Contractor, its agents or officer with any member of the City Council, any board or commission, or the staff of the City of Orinda with regard to this process.

Date: _____

CONTRACTOR NAME

CONTRACTOR SIGNATURE

[Signature must be notarized. Attach acknowledgement form.]

SIGNATORY'S TITLE/OFFICIAL CAPACITY

EXHIBIT F

INSURANCE DOCUMENTS TO BE PROVIDED BY CONTRACTOR

Insurance documents to be provided by Contractor pursuant to this Contract and accepted by the City.

EXHIBIT G

CONTRACTOR SAFETY PROGRAM: SELF-CERTIFICATION WORKSHEET

The following worksheet must be completed during the preconstruction meeting or as requested by the City of Orinda. Incomplete or missing responses will be deemed NON-RESPONSIVE.

Part A: Safety Programs

Part A is used to:

- Verify whether a prospective contractor has safety documents and programs relevant to the work they may be performing.
- Inform the prospective contractor of the safety programs that will be mandatory to the project.
- Confirm that the contractor's employees have been trained in project-related safety programs and that there is documentation of the training.
- Give prospective contractors an opportunity to provide more information about their safety programs that may be important and relevant to the project.
- Inform contractors of the types of safety information that may be requested at a later time.

Part B: Safety Equipment

Part B is used to:

- Verify whether a prospective contractor has safety equipment relevant to the work they may be performing.

Part C: Specialized Training and Certification

Part C is used to:

- Verify whether a prospective contractor's employees hold specialized safety certifications relevant to the work they may be performing.
- Inform contractors of the types of specialized safety certifications their employees may be required to possess before being issued a Notice to Proceed.

Part D: Jobsite Safety Practices

Part D is used to:

- Address how safety aspects of the project will be managed and provide a basis for discussing the contractor's safety program practices.

Part E: Certification and Signature

Part E is used to have the bidder certify the following:

- ▶ The submitted information is accurate and complete.
- ▶ Allow the bidder the opportunity to certify that all bidder safety programs, safety equipment and employee safety training described herein meets or exceeds all local, State and Federal requirements.

Bidder Safety Program Self-Certification Worksheet

PART A - Safety Programs

Please indicate below whether your firm has the following written safety programs. If any of the programs listed do not apply to your operations or this project, please make note of this in the “Comments” column. Those programs that have been checked are, without exception, mandatory and must be made available for review, upon request, before commencing work on this project. Other safety programs may be requested if it is later determined that they are applicable to the project and must be made available for review upon request.

Mandatory	Program	Do you have a written program/policy?		Sub will provide	Have project employees been trained?		Is the training documented?		Comments
		Yes	No		Yes	No	Yes	No	
X	Injury and Illness Prevention								
	Hazard Communication								
	Confined Space Operations								
	Respiratory Protection								
	Emergency Response								
X	Site-Specific Project Safety Plan								
	Lockout/Tagout Program								
X	New Employee Orientation								
	Excavation Safety Program								
	Code of Safe Program								
	Electrical Safety Program								
	Drugs/Alcohol								
	Traffic Control Safety ⁽¹⁾								
	Fall Prevention Plan ⁽²⁾								
	Forklift Program								
	Hotwork Program								
	Bloodborne Pathogens Control Program								

(1) Reflecting M.U.T.C.D and California Supplement requirements

(2) If conventional fall protection measures cannot be used.

PART B - Safety Equipment - Identify what safety equipment will be available and used for this project.

Type	Description/Comments
<input type="checkbox"/> Gas detectors	
<input type="checkbox"/> Ventilation equipment	
<input type="checkbox"/> Approved harnesses and lanyards	
<input type="checkbox"/> Mechanical hoists	
<input type="checkbox"/> Fire extinguishers	
<input type="checkbox"/> First aid kits	
<input type="checkbox"/> Respirators	
<input type="checkbox"/> Hard hats	
<input type="checkbox"/> Hearing protectors	
<input type="checkbox"/> Safety goggles	
<input type="checkbox"/> Steeled toed footwear	
<input type="checkbox"/> Hand protection	
<input type="checkbox"/> Fall protection	
<input type="checkbox"/>	
<input type="checkbox"/>	

PART C - Specialized Training and Certification - Identify the areas of specialized training or certification that will have been completed by employees who will be assigned to this Project. Be prepared to provide documentation as requested.

<input type="checkbox"/>	CPR/first aid	<input type="checkbox"/>	Confined space operations and rescue	<input type="checkbox"/>	Scaffolding
<input type="checkbox"/>	Fork lift operation	<input type="checkbox"/>	Respirators <input type="checkbox"/> Air-Supplying <input type="checkbox"/> Air-Purifying	<input type="checkbox"/>	Flagging
<input type="checkbox"/>	Cranes/hoists operation	<input type="checkbox"/>	Trenching and shoring competent person	<input type="checkbox"/>	
<input type="checkbox"/>	Heavy equipment operation	<input type="checkbox"/>	Welding	<input type="checkbox"/>	
<input type="checkbox"/>	Powder-actuated tools use	<input type="checkbox"/>	Asbestos abatement	<input type="checkbox"/>	

PART D - Jobsite Safety Practices

1. Name of person who will have responsibility for jobsite safety?
2. Does the person who is responsible for jobsite safety have authority to take immediate action to correct unsafe conditions of work practices?
3. Who will be responsible for conducting and documenting accident investigations? Does your company perform near-miss investigations?
4. How often are jobsite safety audits or inspections performed, and by whom?
5. How often are jobsite tailgate or toolbox safety meetings held?
6. Briefly describe how you will ensure that workers comply with City safety requirements and Cal/OSHA requirements?
7. Has CAL OSHA cited and assessed penalties against your firm for any "serious," "willful" or "repeat" violations of its safety or health regulations in the past five years? If "YES", please describe.
8. Have there been any on-the-job fatalities in the last five years? If yes, please explain.
9. Has the EPA or any Air Quality Management District or any Regional Water Quality Control Board cited and assessed penalties against either your firm or the owner of a project on which your firm was the contractor, in the past five years? If "YES", please describe.

PART E - Certification and Signature

I certify that the above information is complete and accurate. I further certify that, to the best of my knowledge, all safety programs and safety training meets or exceeds all applicable local, State and Federal regulatory requirements. I understand that any false statements may result in my firm not being considered for this project or in my firm being terminated from this project.

Name (Print) _____ Title _____

Signature _____ Date _____
(CEO or equivalent signature required)

SECTION 31 10 00
CLEARING AND GRUBBING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes:
 - 1. Removing existing trees, stumps, shrubs, groundcovers, plants, and grass.
 - 2. Clearing and grubbing.
 - 3. Stripping and stockpiling topsoil.
 - 4. Removing above- and below-grade site improvements.
 - 5. Disconnecting, capping or sealing, and removing site utilities.
 - 6. Temporary erosion and sedimentation control measures.
- B. Related work specified elsewhere:
 - 1. Section 32 84 00 - Planting Irrigation
 - 2. Section 32 90 00 - Planting
 - 3. Section 32 91 00 - Planting Preparation
 - 4. Section 32 93 00 - Landscape Maintenance

1.3 DEFINITIONS

- A. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of subsoil and weeds, roots, toxic materials, or other nonsoil materials.

1.4 MATERIAL OWNERSHIP

- A. Except for stripped topsoil or other materials indicated to remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.5 SUBMITTALS

- A. Photographs sufficiently detailed, of existing conditions of trees and plantings, adjoining construction, and site improvements that might be misconstrued as damage caused by site clearing.
- B. Record drawings identifying and accurately locating capped utilities and other subsurface structural, electrical, and mechanical conditions.

1.6 PROJECT CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.
- B. Salvable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated.
- C. Utility Locator Service: Notify utility locator service for area where Project is located before commencing site clearing operations.
- D. Do not commence site clearing operations until temporary erosion, sedimentation control measures, and advance temporary traffic control signs are in place.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. Satisfactory Soil Materials: Requirements for satisfactory soil materials are specified in Section 31 20 00 "Earthwork."

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Protect existing site improvements to remain from damage during construction.
 - 1. At your own cost, restore damaged improvements to their original condition, as acceptable to Owner.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent travel lanes, properties and pavement, according to requirements of authorities having jurisdiction.
- B. Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.
- C. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

3.3 UTILITIES

- A. Locate, identify, disconnect, and seal or cap off utilities identified for removal.
 - 1. Arrange with utility companies to shut off indicated utilities.
- B. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Engineer/Inspector not less than **[5]** working days in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Engineer/Inspector's written permission.
- C. Excavate for and remove underground utilities identified for removal.
 - 1. Backfill excavations in accordance with requirements of Section 31 20 00 "Earthwork".

3.4 CLEARING AND GRUBBING

- A. Throughout all planting areas, remove obstructions, trees, shrubs, grass, and other vegetation to permit installation of new construction.
 - 1. Grind stumps and remove roots, obstructions, and debris extending to a depth of 18-inches below final finish grade, except where proposed trees are located. Where proposed trees are located, for a horizontal distance of 3 feet from and around the center of the proposed tree, grind stumps and remove roots, obstructions and debris extending 3 feet below final finish grade
 - 2. Chip removed tree branches and dispose of off-site.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated. Place and compact fill material in accordance with requirements in Section 31 20 00 "Earthwork".

3.5 TOPSOIL STRIPPING

- A. Where rough grading operations occur, strip topsoil for re-use. Clear and grub before stripping topsoil.
- B. Strip topsoil to whatever depths are encountered in a manner to prevent intermingling with underlying subsoil or other waste materials.
 - 1. Remove subsoil and nonsoil materials from topsoil, including trash, debris, weeds, roots, and other waste materials.
- C. Stockpile topsoil materials away from edge of excavations without intermixing with subsoil. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 1. Limit height of topsoil stockpiles to 36 inches.
 - 2. Locate topsoil stockpiles only within project areas.
 - 3. Dispose of excess topsoil as specified for waste material disposal.
 - a. Stripped topsoil material may be used in landscaped areas if approved in writing by Landscape Architect. Approval will be based on a soil analysis and report conducted by the contractor.

3.6 SITE IMPROVEMENTS

- A. Remove existing above-grade and below-grade improvements as indicated and as necessary to facilitate new construction.

3.7 DISPOSAL

- A. Disposal: Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.
- B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities.

END OF SECTION 31 10 00

SECTION 32 84 00
PLANTING IRRIGATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Furnish all labor, materials, equipment, facilities, transportation and services to complete all water supply, irrigation system and related work as shown on the Drawings and specified herein.
- B. Scope of work:
The general extent of the water supply and irrigation system work is shown on the Drawings and may include, but is not necessarily limited to the following:
 - 1. Installation of automatic irrigation systems and controls.
 - 2. Excavation for points of connection.
- C. Related sections can include, but may not be limited to:
 - 1. Section 31 10 00 - Site Clearing
 - 2.
 - 4. Section 32 90 00 - Planting
 - 5. Section 32 93 00 - Landscape Maintenance

1.3 REFERENCES AND REGULATORY REQUIREMENTS

- A. American Society for Testing and Materials (ASTM)
 - 1. B 62-85 - Standard Specifications for Composition Bronze or Ounce Metal Castings.
 - 2. D 1784-81 - Standard Specifications for Rigid (PVC) Compounds and Chlorinated Poly (vinyl Chloride) (CPVC) Compounds.
 - 3. D 1785-86 - Standard Specifications for (PVC) Plastic Pipe, Schedules 40 and 80.
 - 4. D 2241-84 - Standard Specifications for PVC Pressure-Rated Pipe (SDR Series).
 - 5. D 2564 Standard Specifications for Solvent Cements for (PVC) Plastic Pipe and Fittings.
 - 6. F477 Specification for Elastomeric seals (gaskets) for joining plastic pipe.
- B. National Sanitation Foundation (NSF), requirements for Seal of Approval.
- C. Plastics Pipe Institute (PPI), recommendations for hydrostatic design stresses for PVC pipe.

- D. Standard Specifications for Public Works Construction, 2000 Edition and 2001 Supplement.
- E. State of California, Department of Public Health.
- F. Permits and Fees: Contractor is responsible to obtain all required permits and pay all associated fees unless otherwise noted.

1.4 SUBMITTALS

- A. Conform to requirements of applicable Division Two specifications, General Conditions and Special Provisions.
- B. Submit the following at the beginning of the project:
 - 1. One (1) copy of Materials List of all products specified.
 - 2. One (1) copy of the Product Data or cut sheets of all products specified. No substitutions shall be permitted without written acceptance by the Owner.
- C. Submit the following at project close-out:
 - 1. Final Record Drawings: Two sets of these shall be produced, one for placement at or within the irrigation controller cabinet reduced to 11" x 17" and one full size set for storage at another location desired by the Owner.
 - 2. Both sets shall have all the irrigation valve zone lateral lines color-coded so as to readily distinguish between adjacent zones. The valve size, station number and gallons per minute shall be legible at each valve and shall match how the controller is wired. Additionally, each valve shall be annotated to describe which type of irrigation it is, i.e. spray, rotor, etc. The color-coded copies shall then be professionally laminated in minimum 5-mil clear plastic.

1.5 RECORD DOCUMENTS

- A. Comply with applicable Division Two specifications, General Conditions and/or Special Provisions.
- B. Accurately record locations of all piping and equipment that varies from what is shown on the Drawings horizontally to within one (1) foot and vertically to within 0.5 feet.
- C. Contractor shall keep accurate 'As-Built' record drawings at the project site that are updated on a daily basis. Contractor shall make the record drawings available to the Owner for monthly reviews. Failure to comply may be cause for the withholding of Progress Payments.

1.6 QUALITY ASSURANCE

- A. Unless otherwise specified, install all materials in accordance with manufacturer's recommendations.
- B. Comply with the requirements of the California Plumbing Code and California Building Code: Section 1806A.11 – Pipe and Trenches; NFPA 24, Section 10.4.4.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store PVC pipe in a neat and orderly manner fully supported and protected from sunlight.
- B. All equipment shall be delivered, unloaded and handled so as to protect from damage at all times.

1.8 PROJECT/SITE CONDITIONS

- A. PVC shall not be cemented during wet conditions per the discretion of the Owner.
- B. Trench excavation and backfilling shall not be performed during excessively wet conditions per the discretion of the Owner.

1.9 SEQUENCE AND SCHEDULING

- A. Contractor shall be solely responsible for coordinating, sequencing and scheduling all work with all applicable trades and/or sub-contractors so as to insure proper and timely performance.

1.10 GUARANTY

- A. Conform to applicable Technical Specifications, General Conditions and Special Provisions.
- B. Contractor shall provide a written guaranty covering entire system against defects in installation, workmanship and equipment for a period of one full year from date of written Final Acceptance.
- C. Contractor shall make necessary repairs to the system as well as to other work affected by defects in the system during guaranty period. Repairs shall be made at the Contractor's sole expense.

1.11 MAINTENANCE

- A. Conform to Section 32 93 00 - Landscape Maintenance.
- B. Service: Contractor shall service and maintain system during the Landscape Maintenance Period.
- C. The entire irrigation system shall be under full automatic operations for a period of two days prior to the start of any planting work.
- D. Final Acceptance and start of guaranty period shall occur no earlier than the end of the specified Landscape Maintenance Period.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Use only new materials of brands shown on Drawings, specified herein or as acceptable to the Owner.
- B. All irrigation equipment designated to be salvaged shall be returned to the Owner in good condition at a designated location within 5 miles of the project site.

2.2 PIPE

- A. PVC Pipe: Polyvinyl chloride (Type I) plastic pipe PVC 1120 and NSF approved as indicated on the plans.
 - 1. Pressurized main line: As specified on the Drawings.
 - 2. Lateral lines and sleeves: As specified on the Drawings.
 - 3. All pipes shall be continuously and permanently marked with the following information: manufacturer's name, pipe size, IPS size (schedule no.), type of material, and code number.

2.3 PVC FITTINGS

- A. PVC Fittings: Polyvinyl chloride (Type I) plastic fittings 1120, Schedule 40 or Schedule 80 as may be noted in the Drawings.
- B. PVC Nipples: Polyvinyl chloride (Type I) plastic fittings 1120, Schedule 80.

2.4 BACKFLOW PREVENTER DEVICE – Not included in this contract.

2.5 BACKFLOW PREVENTER ENCLOSURE - Not included in this contract.

2.6 VALVES

- A. Remote Control Valves: As specified on Drawings.
- B. Quick Coupling Valves: As specified on Drawings.
- C. Shut Off Valves: As specified on Drawings.

2.7 VALVE BOXES

- A. Valve boxes: As specified on Drawings, and as follows:
 - 1. Valve box size shall be as required to adequately house all proposed components related to the item that is to be contained within the valve box.
 - 2. Each valve box shall be permanently labeled on the lid identifying the general and specific component (i.e., IRRIGATION REMOTE CONTROL VALVE or IRRIGATION SHUT OFF VALVE).
 - 3. All valve box lids shall be bolted down.
 - 4. Where valve box is located in paving, the lid shall be traffic rated H20, and be bolted down.

2.8 VALVE WIRING

- A. Low Voltage:
 - 1. Conductors:

- a. Control wires shall be solid copper, UL rated for direct burial, Type UF, 14 gauge wire. Insulating jacket color shall be black.
 - b. Common wires shall be solid copper, UL rated for direct burial, Type UF, 14 gauge wire. Insulating jacket color shall be blue.
 - c. Spare control and common wires shall be solid copper, UL rated for direct burial, Type UF, 14 gauge wire, Insulating jacket color shall be black or blue per above designations.
2. Splice connectors: Scotch "DBY" splice connectors or acceptable equal.

2.9 CONNECTING COMPOUNDS

- A. Primer: IPS Corporation Weld-on #P-70.
- B. Cement:
 - 1. IPS Corporation Weld-on #721 for Class 200 P.V.C. or schedule 40 P.V.C. (up to 6" diameter) and schedule 80 (up to 4" diameter) P.V.C. Pipe. IPS Corporation Weld-on #711 shall be used for larger pipe diameters.
 - 2. IPS Corporation Weld-on #795 for flexible P.V.C. to rigid P.V.C. connections.

2.10 BUBBLER HEADS

- A. Bubbler Heads: As specified on Drawings.

2.11 ADDITIONAL MATERIALS

- A. Pipe Detection Tape: "Sentry Line" three (3) inch wide, detectable, "Caution Water Line Buried Below" tape as available from Terra Tape Inc. Houston, Texas (800)-231-6074 or acceptable equal. Install above mainline per plans.
- B. Tracer Wire: Copper wire, UL rated for direct burial in ground, 12 gauge AWG. Insulating jacket color shall be yellow.
- C. Pipe Sleeving: Schedule 40 PVC, unless noted otherwise. Size for water carrying pipe and wiring shall be 2.5 times the size of the largest pipe, but no smaller than 4 inches. Cover ends of sleeves and pipes with root barrier fabric.
- D. Teflon tape shall be of a variety commonly used for wrapping threaded connections.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Prior to starting work, test and verify that water pressure levels meet the requirements specified on the Drawings. Notify the Owner immediately of any discrepancies. The system is designed to operate at a maximum flow of 50 GPM with a minimum 50 static P.S.I. at the point of connection. Contractor shall verify GPM and static pressure prior to beginning work. Contact Owner immediately should discrepancy arise and re-direct work to avoid delay.

- B. Irrigation plans are diagrammatic. Pipe lines shown parallel in the Drawings may be placed in a common trench, provided that a minimum horizontal distance of three inches (3") is maintained between buried lines.

3.2 PREPARATION

- A. Contractor shall make provisions and take necessary precautions to protect existing work or features.
- B. In the event the existing irrigation system is affected by this project, and should the mainline be shut off for any reason during the course of construction, the contractor shall provide ample water by approved alternate means to all landscaping that the existing irrigation system waters. This is to include areas beyond the immediate project limit of work. The contractor shall continue to do so until irrigation system is operable.
- C. Layout: Coordinate lay-out of system with Engineer/Inspector as necessary.

3.3 TRENCHING

- A. Conform to applicable Division Two specifications, General Conditions and Special Provisions.
- B. Excavate trenches with vertical walls, uniform bottom, free of deleterious materials, and wide enough for pipes to lay side by side, fully supported on bottom. There shall be a minimum three inch (3") clearance between all pipes.
 - 1. No lines shall be installed parallel to and directly over another line.
 - 2. When lines must cross, the angle shall be forty-five to ninety degrees, and a minimum of three inch (3") vertical clearance shall be maintained.
- C. Contractor shall use extreme care when it is necessary to trench near existing trees. Excavation in areas exhibiting roots 2" and larger shall be done by hand. Roots 2" or larger in diameter damaged during construction shall be cleanly cut.
- D. Provide minimum coverage depths as follows:
 - 1. Mainline: 24".
 - 2. Lateral Lines: 18".
- E. Hydraulic driving methods shall not be used under paved surfaces.

3.4 PIPE INSTALLATION

- A. Comply with applicable Division Two specifications, General Conditions and/or Special Provisions and manufacturer's instructions.
- B. Rubber Ring Seal Joint:
 - 1. Use factory-made male end or prepare field-cut male end to exact specifications of factory-made end.
 - 2. Carefully clean bell or coupling and insert rubber ring without lubricant. Position ring carefully according to manufacturer's specifications.

3. Lubricate male end according to manufacturer's instructions and insert male end to specified depth. Use hands only when inserting PVC pipe.
 4. Thrust blocks shall be provided where specified and as necessary to resist system pressure on ring-tite pipe and fittings. Thrust blocks shall be concrete and the size shall be based on an average soil safe bearing load of 1,000 pounds per square foot.
 5. Form thrust blocks in such a manner such that concrete comes in contact only with the fittings. Thrust blocks shall be between solid soil and the fitting.
- C. Solvent Welded Joints:
1. Assemble above ground where possible.
 2. Cut square, ream, and thoroughly clean.
 3. Make joint using specified primer and cement, continuously wiping off excess.
 4. Allow sixty (60) minutes of set-up time before handling and twenty-four (24) hours curing before applying water pressure.
- D. Threaded Joints:
1. Use Teflon tape on all pressurized, threaded plastic to plastic and plastic to steel joints.
 2. Hand tighten and use only light strap-type friction wrench pressure to complete.
- E. Where possible, snake lateral line pipe a minimum of one (1) additional foot per one hundred (100) feet of pipe to allow for expansion and contraction.
- F. Pipe shall be installed as specified and generally as shown in Drawings.
- G. Cap or plug openings as soon as pipes have been installed to prevent intrusions of debris.
- H. Sleeves:
1. Install pipe sleeves where necessary, where shown and at all points where pipes and control wires pass through or under concrete or masonry. In footings, install sleeving that allows one inch (1") min. clearance around pipe(s).
 2. Each end of sleeve shall extend 12 inches (12") beyond edge of paving or structure above. Provide removable non-decaying plug at each end of sleeve, to prevent earth from entering pipe. In addition, wrap ends of sleeves with root barrier fabric and into voids of pipe sleeve.
- I. Install thrust blocks as shown in Drawings.
- J. Thoroughly flush system prior to installing valves and nozzles.

3.05 EQUIPMENT AND INSTALLATION

- A. Remote Control Valves:
1. Install as shown in Drawings.
 2. Valve boxes shall be set plumb and square with adjacent structures.

3. Install valve tags in an acceptable manner with valve station and controller number.
 4. Provide twelve (12) inches minimum separation when valve boxes are grouped together and align in a neat and orderly manner.
 5. Locate valves in shrub/ground cover areas whenever possible.
- B. Quick Coupling Valves:
1. Install as shown in Drawings.
 2. Valve boxes shall be set plumb and square with adjacent structures.
- C. Shut Off Valves:
1. Install as shown in Drawings.
 2. Valve boxes shall be set plumb and square with adjacent structures.
- D. Control Wire:
1. Connect control wires to controller in sequential arrangement according to identification number in the Drawings. Label each controller station with permanent non-fading labels indicating identification number of valve controlled.
 2. Install as shown in Drawings.
 3. Bundle multiple wires with tape or ties at ten (10) foot intervals maximum. Do not tape wires in sleeves.
 4. Make all splices in valve boxes using only specified connectors.
 5. Provide thirty six (36) inch wire coil at each remote control valve, all directional changes, and entrances to sleeves.
 6. Install two spare control wires and loop into every remote control valve on system. Terminate wires inside controller enclosure unconnected and clearly labeled as extra.
 7. All wiring under paving shall be installed in a PVC pipe sleeve large enough to allow withdrawal and insertion of individual wires.
 8. If any control wire run is over 2000', up-size applicable control wire to be 12 gauge.
 9. Control wires under paving structure will be installed in a separate sleeve.
 10. Existing extra control wires shall be coiled and placed in a valve box at curb.
- E. Bubbler Heads:
1. Install as shown in Drawings.
 2. Thoroughly flush all lines prior to installing nozzles.
 3. Contractor shall adjust irrigation head location for optimum coverage.
 4. Remote control valves shall be adjusted to avoid misting as applicable.
- F. Valve Boxes:
1. Install as shown in Drawings.
 2. Valve box size shall be as required to adequately house all proposed components related to the item that is to be contained within the valve box.
 3. Each valve box shall be permanently labeled on the lid identifying the general and specific component (i.e., IRRIGATION REMOTE CONTROL VALVE or IRRIGATION SHUT OFF VALVE).
 4. Where valve box is located in paving, the lid shall be traffic rated H20, and be bolted down.

5. Avoid heavy compaction of soil around boxes to prevent collapse of sides of boxes.
- G. Tracer Wire:
1. Install as shown in Drawings.
 2. Tracer wire shall be strapped to main line pipe at 10-foot intervals and extend into all valve and pull boxes for accessibility requirements. All splices shall be soldered and protected per splicing detail shown in Drawings. Remove and/or neutralize all flux residue.

3.6 FIELD QUALITY CONTROL

- A. General:
1. Notify Engineer/Inspector for the following reviews, with 2 working days minimum notice:
 - a. Pressure testing mains and laterals
 - b. Coverage test prior to planting
 - c. Pre-maintenance observation
 - d. Final observation
 2. Contractor shall provide all equipment and personnel required to conduct tests.
 3. Provide up-to-date Project Record Drawings at each review.
 4. If Engineer/Inspector is called out for review prior to the system being ready as specified, the contractor shall be back-charged for the full cost of the review.
- B. Pressure Tests:
1. Do not install remote control valves until testing of pressure main lines has been accepted by the Engineer/Inspector.
 2. Testing shall occur with trenches open. Small amounts of backfill between fittings shall be allowed to prevent pipe displacement. All fittings shall be visible prior to testing.
 3. Test all pressure supply lines under hydrostatic pressure of 125 P.S.I. minimum. Pipe shall hold pressure for a period of six (6) consecutive hours with no more than five (5) P.S.I. loss in order to pass test.
 4. Lateral lines shall be tested under full line pressure for a period of one hour prior to backfilling. Cap all heads and center load pipe between fittings prior to testing.
 5. Correct all deficiencies revealed by tests to the satisfaction of the Owner.
- C. System Flushing:
1. After sprinkler pipe lines and risers are in place and connected, and prior to installation of automatic valves, quick couplers, and sprinkler nozzles, thoroughly flush all lines with water to completely clean lines of debris.
 2. Install sprinkler nozzles only after lines have been flushed to the satisfaction of the Owner.
- D. Coverage Tests:
1. Perform coverage tests after all systems are completed and operational, after finish grading (Refer to Section 32 93 00 – Landscape Maintenance)

has been completed, but prior to any planting, in the presence of the Owner.

2. Correct all deficiencies to the satisfaction of the Owner prior to planting.

3.7 BACKFILLING

A. General:

1. Backfill only after specified tests have been performed and accepted.
2. Clean trenches of all debris and deleterious material before backfilling.
3. Backfill, as shown in Drawings, with native material granular in nature and free from deleterious material. Install pipe detection tape over entire run of mainline as shown in Drawings.
4. Compact trenching to 95% relative density under pavement and 85% relative density within planting areas.
5. Dress off trench surfaces flush with finish grade.

3.8 ADJUSTING

- #### A.
- Adjust and balance system to eliminate over spray and fogging/misting and as directed by Engineer/Inspector.

3.9 DEMONSTRATION

- #### A.
- Instruct Owner's personnel in complete and proper operation of system prior to Final Acceptance.

3.10 PROJECT PLANS AND RECORDS

- #### A.
- The Contractor shall provide and keep up to date, a complete set of Record Drawings, corrected daily and showing all changes from the original Drawings, with exact locations, sizes and kinds of equipment. Prints for this purpose may be obtained from the Engineer/Inspector. This set of Project Plans shall be kept on site and be used only as a record set.
- #### B.
- Record Drawings shall serve as work progress sheets, and the Contractor shall make neat and legible annotations daily as the work proceeds, showing the work as actually installed. These Record Drawings shall be available at all times for inspection and shall be kept at the project site.
- #### C.
- The Contractor shall dimension from two (2) permanent points of reference, such as monuments, signs, curbs, vaults, etc., the location of the following items:
1. Connection to existing water lines (point of connection)
 2. Connection to existing electrical power (point of connection to existing low voltage wires).
 3. Valves, such as shut-off valves, quick coupler valves and remote control valves.
 4. Routing of main lines (dimension 100 feet max. along routing).
 5. Routing of control wiring and location of extra wires.
 6. Other related equipment as directed by the Engineer/Inspector.

- D. On or before the date of the final inspection, the Contractor shall deliver the corrected and completed reproducible Record Drawing to the Engineer/Inspector.

3.11 CONTROLLER CHARTS

- A. Controller Charts shall be prepared upon review and approval of the Record Drawings by the Engineer/Inspector. Submit two (2) Controller Charts for each controller.
- B. The Controller Chart shall show the area controlled by the automatic controller and shall be the maximum size that will fit inside the controller. It shall be a reduced-size drawing of the actual Record Drawing, but must be legible as determined by the Engineer/Inspector. If deemed illegible by the Engineer/Inspector, Contractor shall submit revised Charts at a large size and scale.
- C. The Controller Chart shall be colored to highlight the area of coverage controlled by each remote control valve. It shall be hermetically sealed between two pieces of plastic; each piece being a minimum thickness of 10 millimeters.
- D. All Controller Charts shall be completed and approved prior to final inspection of the irrigation system.

3.12 FINAL REVIEW

- A. Provide Owner with all Record Drawing submittals, turn-over materials, salvaged items and warranty requirements prior to Final Review.

END OF SECTION 32 84 00

SECTION 32 90 00

PLANTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SCOPE

- A. Furnish and install all plantings, staking, mulch placement, wood header, and related work thereto.
- B. Related work specified elsewhere:
 - 1. Section 32 84 00 - Planting Irrigation
 - 2. Section 32 91 00 - Planting Preparation
 - 3. Section 32 93 00 - Landscape Maintenance

1.3 QUALITY CONTROL

- A. Reviews: The Contractor shall specifically request the following reviews prior to progressing with the work:
 - 1. Plant material approval
 - 2. Plant layout
 - 3. Finish grade
 - 4. Substantial completion
 - 5. Final completion

1.4 SUBMITTALS

- A. Plant Material: Within 18 calendar days after award of contract, Contractor shall submit notice to the Engineer/Inspector certifying the quantity and species of plant material ordered, the nursery supplying the material, any plant material unavailable at the time, and proposed plant substitutions. No plants shall be ordered or delivered prior to written acceptance by the Engineer/Inspector.
- B. Mulch: Within 18 calendar days after award of contract, Contractor shall submit written certificates stating composition and origin of mulch to the Engineer/Inspector. Contractor shall submit two 1-gallon samples with certificates.
- C. Plant Materials Products:
 - 1. Thirty (30) days prior to planting, submit four (4) copies of documentation that all plants specified have been ordered. Include names and addresses of all suppliers.
 - 2. Substitutions: If substitutions are required, they shall be brought to the attention of the Owner, at time of submittal, for any requested substitutions.

3. Submit four (4) copies of product data or “cut-sheets” for all products proposed for use.
- C. Samples: Submit four (4) samples of the following (1 quart size “zip-lock” plastic bag min. each):
 1. Soil amendment (with current evaluation and sieve analysis).
 2. Bark mulch top dress.
 - D. Certificates: Submit “cut-sheets” or other product literature showing certified chemical analysis of the following:
 1. All fertilizers.
 2. All herbicides.

1.5 SOURCE/QUALITY ASSURANCE

- A. Control of work: Comply with the Standard Specifications.
- B. Control of materials: Comply with the Standard Specifications.
- C. Contractor shall provide on-site supervision at all times during execution of this Section by at least one person who is thoroughly familiar and experienced with the materials and products being installed and proper methods of their installation. Notify the Engineer/Inspector immediately of all changes in supervision.
- D. General: Ship plant material with certificates of inspection required by governing authorities. Comply with regulations applicable to plant materials (as applicable).
- E. Shrubs and Plants: Provide shrubs and plants of quantity, size, genus, species and variety shown and scheduled for landscape work and complying with recommendations and requirements of ANSI Z60.1 “American Standard for Nursery Stock.” Provide healthy, vigorous stock, grown in a recognized nursery in accordance with good horticultural practice and free of disease, insects, etc., larvae, and defects such as girdling or bound roots, knots, sun-scald, injuries, abrasions or disfigurement.
- F. Analysis and Standards: Package standard products with manufacturers certified analysis. For other materials, provide analysis by recognized laboratory made in accordance with methods established by the Association of Official Agriculture Chemists, wherever applicable.
- G. Quality Review: The Engineer/Inspector shall inspect & approve all shrubs before planting for compliance with specified requirements for genus, species, variety, size and quantity. Engineer/Inspector retains right to further review shrubs for size and condition of root systems, trunks, stems branches or structure, buds, etc., and to disqualify unsatisfactory or defective material at any time during the progress of work. Engineer/Inspector will tag all trees to be retained for the project. Remove disqualified trees or shrubs immediately from project site and replace with materials acceptable to Engineer/Inspector. Provide two-week notice of plant arrival date of all plant material.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. General:
 - 1. Handle and store all products of this Section in such a manner as to protect them from damage at all times.
 - 2. Storage of products on-site shall be coordinated by the Contractor in an orderly manner.
- B. Plants:
 - 1. Delivery: Coordinate with Engineer/Inspector. Provide proper identification for landscape labor force and vehicles at all times while on site.
 - 2. Storage: Coordinate with Engineer/Inspector. Provide exposure as required by plant variety and provide wind & solar protection for all plants. Water regularly to maintain thorough moisture in root zone. Temporary, automatic irrigation system will be required at discretion of Engineer/Inspector if extended storage period becomes necessary. Protect dark colored plant containers from direct exposure to the sun.
 - 3. Contractor shall protect and maintain all plant material from time of delivery to time of final acceptance. Engineer/Inspector shall not be responsible for losses due to vandalism, theft, or severe weather conditions.
 - 4. Labeling: At least one plant of each variety or type shall be legibly labeled at all times clearly indicating correct plant name as indicated on Drawings. Labels shall be durable, waterproof, and vandal resistant.
- C. Fertilizers:
 - 1. Deliver in original, unopened containers with original labels intact and legible which state the guaranteed chemical analysis.
- D. Bulk Material:
 - 1. Coordinate delivery and storage of bulk material with Engineer/Inspector.
 - 2. Confine materials to neat piles in areas acceptable to the Engineer/Inspector.

1.7 REFERENCES AND REGULATORY REQUIREMENTS

- A. American Joint Committee on Horticulture Nomenclature (AJCHN):
Standardized Plant Names
- B. American Association of Nurserymen, Inc. (AAN):
American Standard for Nursery stock
- C. Sunset Western Garden Book, Lane Publishing CO.
- D. Agricultural Code of California.
- E. General provisions of the "Greenbook" Standard Specifications for Public Works Construction, 2000 Edition, written and promulgated by Public Works Standards, Inc.

1.8 PROJECT/SITE CONDITIONS

- A. Planting operations shall not be conducted under the following conditions, subject to the discretion of the Engineer/Inspector:
 - 1. Freezing weather
 - 2. Excessive heat

3. High winds
4. Wet conditions

1.9 GUARANTEE

- A. All work executed and all materials provided or used under this Section shall be guaranteed, in writing by the contractor, to be free of defects and poor workmanship for a period of one year after Final Acceptance.
- B. All plant materials shall be guaranteed to be in a healthy and thriving condition one (1) year after Final Acceptance, unless it can be proven, to the satisfaction of the Engineer/Inspector that the unhealthy or non-thriving material is due to causes other than the Contractor's materials or workmanship.
- C. Replace all dead plants and plants not in vigorous condition immediately upon notification by Engineer/Inspector during Guaranty Period. Replaced plants shall be subsequently guaranteed by the contractor for an additional year following date of replacement.
- D. Repair all defective materials and work as acceptable to the Engineer/Inspector during guaranty period.

1.10 MAINTENANCE PERIOD

- A. Refer to Section 32 93 00 - Landscape Maintenance for information.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Nomenclature and Labels: Plant botanical names shall conform to "Standardized Plant Names", second edition, and secondly, "A Checklist of Woody Ornamental Plants of California", Manual 32, University of California. All plants of each clone, species, and cultivar shall be delivered to the site labeled with their full botanical names. Every plant species shall be labeled with no less than one label for every ten plants of a species.
- B. Quality: Minimum quality of all plant material shall conform to prevailing published specifications of the California Association of Nurserymen and the American Association of Nurserymen 'American Standard for Nursery Stock' unless otherwise indicated. Additional specifications shall be indicated on the drawings.
- C. Quantities: the quantities shown on the plant list and in labels are for the Engineer/Inspector's use and are not to be construed as the complete and accurate limits of the contract. Contractor shall furnish and install all plants shown schematically on the drawings. Any unlabelled plants shall be considered as the smaller size shown for that type on the drawings.
- D. Root Systems: All container-grown stock shall be grown in its container for at least six months prior to its planting. Contractor shall allow one percent of the quantity of plants for removal and inspection. Any plant material, within one year following the final acceptance of the project, determined by the

Engineer/Inspector to be defective, restricted, declining or otherwise deficient due to abnormal root growth, shall be replaced by Contractor, to the equal condition of adjacent plants, at the time of replacement.

- E. Health: Foliage roots and stems of all plants shall be of vigorous health and normal habit of growth for its species. All plants shall be free of all diseases, insect stages, burns, or disfiguring characteristics.
- F. Untrue Species: All plant material, within two years following the final acceptance of the project, determined by the Engineer/Inspector to be untrue to the species, clone, and/or variety specified, shall be replaced by the Contractor, to the equal condition of adjacent plants at the time of replacement.
- G. Mulch: Shall be Earthblend Mulch, "Natural" color, (website www.earthblendmulch.com) phone no. 925-250-0334. Substitutions may be considered, however, prior approval by the Engineer/Inspector is required prior to installation. Submit sample and product information.
- H. Tree Stakes and Ties: Shall be as indicated on the drawings. Tree stake size shall be 3" minimum diameter.
- I. Root Barrier: Root Barrier: Shall be by "DeepRoot", model no. UB 24-2, 24" Universal Barrier, or equal.
- J. Herbicides: Shall be as follows:
 - 1. Pre-emergent: "Ronstar-G" pelletized, "Surflan" liquid, or acceptable equal.
 - 2. Other: All other herbicides shall be accepted by Engineer/Inspector prior to use.
- N. Other Materials:
 - 1. Provide all other materials necessary to complete landscaping work as shown on Drawings and specified herein.
 - 2. All products and materials, including those specified above, shall be new, first quality as acceptable to the Engineer/Inspector.

PART 3 - EXECUTION

3.1 GENERAL

- A. Plant Material Approvals: Before planting operations commence, all or a representative sampling of plant material shall be reviewed at the site by the Engineer/Inspector. Defective plants installed without such review shall be removed from the site upon request by the Engineer/Inspector and an acceptable plant substituted in its place. Provide two-week notice of plant arrival date of all plants prior to installation. Plant review will occur once (within span of one business day) for all plant material.
- B. Layout: Only those plants to be planted in any single day shall be laid out. Locations of all plants shall be reviewed prior to planting. Plants installed without this review shall be transplanted as directed by the Engineer/Inspector.

- C. Protection of Plants: Contractor shall maintain all plant material in a healthy growing condition prior to and during planting operations. Contractor shall be responsible for vandalism, theft and damage to plant material until the commencement of the maintenance period.
- D. Root Systems: Contractor shall be responsible for inspection of all root systems on plant materials. Inspection shall include, but not be limited to, checking for rootbound stock, encircling roots at the perimeter of the container, girdling roots at the top surface of the rootball, and other defective root conditions. Such inspections shall include the complete removal of soil from one percent of plant material containers, or at least one plant from each nursery and each plant type. Contractor shall cut defective or potentially defective girdling, rootbound, and encircling roots and spread the root system into the surrounding backfill. The Contractor shall reject plants with excessively defective root systems.
- E. Pruning: Contractor shall do no pruning without the specific approval of the Engineer/Inspector. Plants pruned without approval shall be replaced by the Contractor, if required.
- F. Basins: Construct basins as necessary to water plants. Remove basins from all plants under a permanent irrigation system prior to final inspection and finish grade the planting area. Basins for plants to be hand-watered shall remain in place. Basin bottoms shall drain to berm away from plant stem.
- G. Staking: All trees shall be staked as drawn with stakes driven securely into existing soil aligned with the trunk and perpendicular (where applicable) to the direction of the prevailing winds.
- H. Root Barriers: Shall be installed as indicated on the drawings.
- I. Plant Pits, Backfill and Finish Grading: See PLANTING PREPARATION Section for materials and installation requirements.
- J. Cleanup: After completion of all operations, Contractor shall remove all trash, excess soil and other debris. All walks and pavement shall be swept and washed clean, leaving the entire area in a neat, orderly condition.
- K. Weed Control Treatment: Prior to applying mulch, all planted areas (excluding turf) shall be treated with Regal Ronstar per the manufacturer's specifications for pre-emergent treatment.
- L. Mulch: Place mulch in all planting areas. Depth of mulch shall be as indicated on the Drawings.

3.2 PLANTING

- A. Layout: Plant layout shall be inspected and approved by a representative of the Engineer/Inspector prior to installation. This inspection will occur simultaneous to the plant inspection day.
- B. Plant Pit Excavation:
 - 1. Excavate pits to sizes indicated in Drawings.

2. Thoroughly scarify all sides of plant pits to remove "auger slick" and encourage root penetration.
- C. Set plant in pit on undisturbed native soil or compacted backfill base as per Details. Set plumb and rotate plant for best appearance. Thoroughly scarify all plant rootballs to eliminate any circling roots and to encourage root growth. Set plant so root crown level will be above surrounding grade, after settlement, as indicated in the Drawings, and with nursery stakes facing north.
- D. Contractor shall place plant materials so they do not interfere with irrigation system or inhibit required coverage. Plant locations may be adjusted as long as design intent is not compromised. Contractor shall give minimum 10 full working days notice for observation. Contractor shall set out plant material as per plan and receive approval from Engineer/Inspector with respect to plant health and location prior to installation. Contractor shall replace any material as requested by the Engineer/Inspector.
- E. When work has to occur under the drip line of existing trees not scheduled for removal, the contractor shall use all possible care to avoid injury to the trees and tree roots. Grade in lines radial to the existing trees rather than tangential. All partial cuts or tears through roots 2" in diameter and larger shall be cut clean. Trenches adjacent to roots shall be filled within 24 hours after excavation. Where this is not possible, the side of the trench adjacent to the tree, and any exposed roots, shall be kept shaded and moist with dampened burlap or canvas at all times.
- F. Backfilling:
 1. Backfill mix for 1 gallon size and larger shall consist of 100% native site soil with plant tabs added per manufacturer's recommendations.
 2. Tamp backfill mix under and around rootballs.
 3. Flood plant pit when half backfilled; allow to drain.
 4. Complete backfilling. Tamp as necessary, do not over compact.
- G. Watering:
 1. Thoroughly water plants immediately after planting.
 2. Construct water basins as specified in Drawings.
- H. Finish Grade Restoration: Restore finish grades by hand raking. Dispose of excess subgrade soil.

3.3 HERBICIDE APPLICATION

- A. Apply in accordance with manufacturers' recommendations and a recommendation from a state licensed Pest Control Advisor.
- B. Apply pre-emergent herbicide to soil prior to placement of bark mulch top-dress.

3.4 MULCH TOP DRESS

- A. Apply specified mulch top dress to all planting. Depth of mulch layer shall be as indicated on the drawings.

- B. Rake bark mulch top dress evenly to create a uniform surface and pull bark mulch top dress away from trunks or stalks of plants. Leave 6" bark-free collar around shrubs.

3.7 ROOT BARRIER

- A. Install root barrier per manufacturer's recommendations.
- B. Install root barrier as indicated on the drawings.

3.6 FIELD QUALITY CONTROL

- A. The Owner shall review and accept the following prior to contractor proceeding with subsequent work:
 - 1. Preparation - At completion of finish grading and prior to planting, grading tolerances and soil preparation shall be checked for conformance to Construction Documents.
 - 2. Layout - Layout of plants, header board, and other major items shall be as directed and/or accepted by the Owner.
 - 3. Pre-maintenance review - At completion of this Section, work shall be reviewed to check conformance with Construction Documents. Acceptance by Engineer/Inspector shall mark beginning of the specified maintenance period. If acceptance is not given, a punch-list of items requiring attention will be issued to the Contractor. One more review will be allowed after contractor certifies in writing that the punch-list has been completed. Punch-list items shall be completed to the Engineer/Inspector satisfaction prior to the Owner issuing acceptance of the improvements and commencement of the Specified Maintenance Period.
- B. All costs incurred from repeat reviews required due to contractor not being prepared or non-conformance with Construction Documents shall be back charged to the contractor at \$500.00 per review.

END OF SECTION 32 90 00

SECTION 32 91 00

PLANTING PREPARATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SCOPE

- A. Furnish and install all landscape soil preparation as shown and specified, including, but not necessarily limited to, the following: topsoil placement, organic amendment and fertilizer placement, soil scarification, and finish grading.
- B. Related work specified elsewhere:
 - 1. Section 31 10 00 - Site Clearing
 - 2. Section 32 84 00 - Planting Irrigation
 - 3. Section 32 90 00 - Planting
 - 4. Section 32 93 00 - Landscape Maintenance

1.3 QUALITY CONTROL

- A. Reviews: Contractor shall specifically request at least two days in advance the following reviews prior to progressing with the work:
 - 1. Completion of rough grading
 - 2. Completion of regrading of native material
 - 3. Verification of amendment incorporation depths
 - 4. Finish grade
- B. Certification: Written certificates stating quantity, type, and composition, weight and origin for all amendments and chemicals shall be delivered to the Engineer/Inspector before the material is used on the site.
- C. Soil Samples: Contractor shall provide a one-quart sample of the onsite topsoil to Soil and Plant Laboratory of Santa Clara, (408) 727-0330, for their testing for conformance to this specification. No material shall be delivered to the site, placed on-site, graded on-site, or otherwise modified until the Engineer/Inspector approves the material. All testing costs shall be paid for by the Contractor. Contractor shall allow for sufficient time for such testing prior to construction. Testing costs for the initial samples and costs for any additional samples due to non-compliance shall be paid for by the Contractor.
- D. Amendment Samples: Contractor shall provide a one-quart sample of each proposed amendment to Waypoint Analytical in San Jose, (408) 727-0330, for their testing for conformance to this specification. No material shall be delivered to the site until the Engineer/Inspector approves the samples. Testing costs shall be paid for by the Contractor.

- E. Planting Areas: All areas to be planted, whether in seed, container stock, flats, or otherwise, are defined as planting areas in these documents.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Topsoil: Topsoil shall be onsite topsoil and meet the classification of 'Sandy Loam'. A sample of the onsite topsoil shall be submitted for analysis 45 days minimum prior to cultivation. Acceptable onsite topsoil shall be fertile and friable, free from "rocks" (rock, stones, rubble, clay clods, etc. over 2" in diameter), noxious seeds, roots, toxins, refuse, debris, heavy clay and any other deleterious materials per the discretion of the Engineer/Inspector. Submit samples and current soil fertility and structure analyses in the quantity previously specified.

For the onsite topsoil:

1. Soil Chemistry Characteristics shall be:
 - a. Reaction- pH of saturated paste = 5.5 to 7.5
 - b. Salinity (Electrical conductivity in mmho/cm) = <4.0
 - c. Sodium Adsorption Ratio (SAR) = <6.0
 - d. Sodium = <5.0 milliequivalents per liter
 - e. Chloride = <5.0 milliequivalents per liter
 - f. Boron (Parts Per Million in extract) = <1.0
 3. Soil Fertility Characteristics
 - a. Adequate amounts of nitrogen, potassium, phosphorus, calcium, and magnesium should be available to support healthy plant growth. Deficiencies shall be mitigated with inorganic fertilizer amendments following importation.
 4. Soil Physical Properties
 - a. Soil texture shall be a sandy loam or loam as evaluated by an USDA sieve analysis. Sand fraction of sandy loam soil shall be properly distributed so that soil is not subject to compaction. Minimum organic content shall be minimum 2% and maximum 5% based on dry weight and determined by ash method of analysis.
 - b. Required Particle Size Distribution (sandy loam):

Medium sand:	5-10%
Fine sand:	80-85%
Silt and Clay:	<7%
- B. Fertilizer: Shall be determined from soils analysis results. For purposes of bidding only, assume the following:
- | | |
|-------------------------------------|---|
| <u>Assume per 1000 square feet:</u> | |
| 3 cubic yards | Nitrogen Stabilized Organic Amendment |
| 125 pounds | Agricultural Gypsum |
| 3 pounds | Ureaform 38-0-0 (20% water insoluble N) |
| 20 pounds | Commercial Fertilizer (6-20-20) |
| 10 pounds | Potassium Sulfate (0-0-50) |

- C. Organic Soil Amendment: Shall be determined from soils analysis results. For purposes of bidding only, assume the following:
Organic Soil Amendment shall be "Super Humus" Compost as available from BFI Organics Inc. 1995 Oakland Road, San Jose, California, 95131 Ph.: (408) 262-1401 Fax: (408) 262-0603; or "Organic Compost" as available from Z-Best Products Inc., 705 Los Esteros Road, San Jose Ca. 95134 Ph.: (408) 934-6152 Fax: (408) 263-2393; or acceptable equal. Acceptable material shall meet or exceed the following criteria:
- a) Gradation: A minimum of 90% of the material shall pass a 2" screen. Material passing shall meet the following criteria:

<u>% Passing</u>	<u>Sieve Designation</u>
85-100	9.51 mm (3/8")
50-80	2.38 mm (No. 8)
0-40	500 Micron (No. 35)
 - b) Organic Content: Minimum 25% based on dry weight and determined by ash method. Minimum 240 lbs. organic matter per cubic yard of compost.
 - c) Carbon to Nitrogen Ratio: Maximum 35:1 if material is claimed to be nitrogen stabilized.
 - d) PH: 5.5-8.0 as determined in saturated paste.
 - e) Soluble Salts: Refer to manufacturer's specification guidelines.
 - f) Moisture Content: 25-60%
 - g) Contaminants: Shall be free of glass, metal and visible plastics.
 - h) Color / Odor: Color shall be dark brown to black. Odor shall be soil-like, (musty or moldy) not sour, ammonia-like or putrid.
- D. Soil Sulphur: Shall be agricultural grade, 99% pure, pelletized/granular form, not powdered.
- E. Iron Sulphate: Shall be "Gro-Power Premium Green" non-staining iron with micronutrients, soil penetrant, trace minerals, and humic acids as available through Gro-Power Inc. Ph.: (800) 473-1307, or Approved Equal.

PART 3 - EXECUTION

3.1 LIMITS AND GRADES

- A. Prior to commencing soil preparation operations, Contractor shall request a review by the Engineer/Inspector to verify specified limits and grades of work completed to date and soil preparation work to commence. Contractor shall complete the rough grading as necessary to round the top and toe of all slopes, providing naturalized contouring to integrate newly graded areas with the natural topography. Finish grading under this section shall be completed in accordance with the grades indicated on the drawings.

- B. All planting areas shall receive topsoil to a depth of 6" below the final finish grades, and where designated per the drawings and other technical specification sections.

3.2 SUBGRADE AND TOPSOIL SCARIFICATION

- A. All planting areas shall be ripped twice in opposite direction to a depth of 12" below final finish grade. Upon completion of scarification, compact to 85% relative density.
- B. Where topsoil placement occurs, compact to 85% relative density.

3.3 ORGANIC AMENDMENT AND FERTILIZER INCORPORATION

The following recommendation for topsoil is for bidding purposes only.

- A. Shall be determined from soil analysis results. For bidding purposes only assume the specified materials shall be uniformly distributed throughout all new planting areas and incorporated to a homogeneously blended soil depth of six inches.

3.4 PLANT PITS

- A. Plant pits shall have their sides and bottoms loosened or otherwise broken to prevent glazed or compacted surfaces, and shall be as shown on the planting detail.

3.5 BACKFILL

- A. Only unamended soil shall be used beneath the root ball; cultivate bottom of plant pit to improve porosity. Backfill around sides of rootball shall be a mixture of 1/3 organic amendment and fertilizer and 2/3 soil excavated from plant pit.

3.6 PLANT TABLETS

- A. All container plants shall receive plant tablets as follows:

One-gallon plants	two 21-gram tablets
Five-gallon plants	five 21-gram tablets
Fifteen-gallon plants	twelve 21-gram tablets
24 inch box trees	eighteen 21-gram tablets
36 inch box trees & larger	twenty-three 21-gram tablets

Space the tablets evenly around the root ball halfway up backfill touching side of root ball. Engineer/Inspector may require excavation of plants selected at random for conformance review.

3.7 FINISH GRADING

- A. Contractor shall finish grade all planting areas unless otherwise noted, and shall remove all rocks and clods over one cubic inch to a depth of one inch below

finish grade. All areas shall be smooth and uniformly graded. All erosion damage during the construction period shall be repaired by the Contractor.

- B. Unless otherwise noted, all finish grades, which includes the mulch, shall be one inch below finish surface of boxes, pavements, and curbs.

END OF SECTION OF SECTION 32 91 00

SECTION 32 93 00

LANDSCAPE MAINTENANCE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SCOPE

- A. Work in this section includes the growing and maintenance operations necessary to establish the shrubs, trees, and other plantings; to provide pest and disease control, general site clean-up, maintain the irrigation system and related construction elements.
- B. Related work specified elsewhere:
 - 1. Section 32 84 00 – Planting Irrigation
 - 2. Section 32 90 00 – Planting
 - 3. Section 32 91 00 – Planting Preparation

1.3 SUBMITTALS

- A. Soil Testing: Contractor shall collect one one-quart sample in the turf area of the in-place topsoil 20 calendar days after completion of planting and submit to Waypoint Analytical in San Jose, (408) 727-0330, for maintenance period fertilizer recommendation. Test results shall be made available to the Engineer/Inspector. Sample shall be a representative composite taken from several planting areas. Cost of soil test shall be paid for by the Contractor.
- B. Herbicide: Submit a written recommendation from a State of California appropriately licensed individual along with complete product data from proposed manufacturer, for review by Engineer/Inspector and/or Owner's appropriately licensed individual.

1.4 REFERENCES AND REGULATORY REQUIREMENTS

- A. General provisions of the "Greenbook" Standard Specifications for Public Works Construction, 2000 Edition, written and promulgated by Public Works Standards, Inc.

1.5 QUALITY ASSURANCE

- A. Control of work: Comply with the Standard Specifications.
- B. Control of materials: Comply with the Standard Specifications.
- C. The Maintenance Contractor shall be experienced in horticulture and landscape maintenance, practices and techniques, and shall provide sufficient number of

workers with adequate and well maintained equipment to perform the work during the Landscape Maintenance Period.

1.6 LANDSCAPE MAINTENANCE PERIOD

- A. Landscape Maintenance Period shall be **60 Calendar Days**.
- B. Continuously maintain the entire project area during the progress of the work, during the specified Landscape Maintenance Period or until Final Acceptance of the project by the Owner.
- C. Landscape Maintenance Period shall not start until all elements of construction, planting and irrigation for the entire project are in accordance with Contract Documents. A prime requirement is that all landscape areas shall be planted. If such criteria are met to the satisfaction of the Owner, a written notification shall be issued to establish the beginning date of Landscape Maintenance Period. Additionally, all elements contained on the Pre-maintenance Punch-list shall have been completed to the satisfaction of the Owner.
- D. Any day of improper maintenance, as determined by the Owner, shall not be credited as an acceptable Landscape Maintenance Period day. The Landscape Maintenance Period shall be extended on a day-for-day basis should this occur until proper maintenance, as determined by the Owner, is being performed.
- E. Contractor shall secure the project site against trespass, vandalism or theft during the Landscape Maintenance Period, subject to the satisfaction of the Owner.

1.7 GUARANTY

- A. All work executed under this section shall be guaranteed against any and all poor, inadequate or inferior materials and/or workmanship, as determined by the Owner, for the entire Landscape Maintenance Period and for a period of one year after Final Acceptance of project.
- B. The contractor shall install all replacement material in conformance with the Contract Documents.

1.8 FINAL ACCEPTANCE

- A. Upon completion of all project work, including Landscape Maintenance Period, the Owner will, upon written request from the contractor (10 working day minimum notice), make an observation to determine conformance with the Contract Documents.
- B. If, at the final project observation, work is found at variance with the Contract Documents, or is otherwise unacceptable, the Owner shall issue a punch-list of items requiring attention to the contractor. The Contractor shall repair, replace or otherwise correct all non-compliant work, continue Landscape Maintenance Period, and make another written request to the Owner to verify punch-list completion. If punch-list is found to be incomplete, or if site is still found to be unacceptable, the Contractor shall be back-charged as necessary for all additional observations required to issue Final Acceptance. All replacement

materials and installations shall be in accordance with the Contract Documents. Remove rejected work and materials immediately from project. Prior to Final Acceptance, Contractor shall provide the Owner with all Record Drawings (accurate "as built") and written Guaranty Statements in accordance with the Contract Documents.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Fertilizer: Used during the course of the maintenance period shall be determined by soils test required under Part 1 of this Section. For bidding purposes only, assume the use of ammonium sulfate (21-0-0) at 5 lbs. per 1000 SF, minimum of two applications.
- B. Water: During the course of construction and maintenance period water shall be paid for by the Owner.
- C. Herbicide: Shall be a commercially available pre-emergent herbicide material recommended for this project and these plantings by a State of California appropriately licensed individual. The licensed individual shall review all planting, including trees, the types and extent of soil preparation, the irrigation systems, drainage patterns, and other project characteristics to verify type, compatibility, and recommend the appropriate herbicide(s) for use. Contractor shall be responsible for all overspray, spreading, runoff, plant health, and other impacts from the use of the herbicide.

PART 3 - EXECUTION

3.1 TIME LIMITS:

- A. The maintenance period shall commence from the date of substantial completion of planting as defined in paragraph 3.8 below, and extend for a 60 calendar day period thereafter, or until the acceptance of Final Completion.

3.2 WATERING:

- A. Water appropriately (based on plant type and includes non-irrigated hydroseeded areas) to insure vigorous and healthy plant growth until work is accepted. Water or irrigate in a manner to prevent runoff or erosion. When hand watering, use a "water wand" to break the water force.

3.3 FERTILIZER APPLICATION:

- A. Fertilizer(s) shall be applied per Soil and Plant Laboratory recommendations. For bidding purposes, assume initial application to be two weeks after planting and subsequent applications to be at 30-day intervals.

3.4 HERBICIDE APPLICATION:

- A. Herbicide shall not be used until all plant material has been planted a minimum of 20 calendar days. All planting areas shall be kept weed-free by non-herbicide methods during this time period. Herbicide shall not be applied to any areas that

are or have been seeded. Contractor must apply the material in conformance with the written recommendations of the State appropriately licensed individual.

3.5 BASIC REQUIREMENTS:

- A. All planting areas shall be kept weed-free at all times during the maintenance period. All pest and disease control shall be the Contractor's responsibility. All planting areas shall be kept at optimum moisture for plant growth. Settlement of soil and plants and soil erosion shall be repaired and areas replanted as required. Dying or deficient plants shall be replaced as soon as they become apparent.

3.6 WEEDING:

- A. Entire project site shall be kept free of weeds at all times. Control new weed growth with pre-emergent herbicides dispensed by mechanical means. If weeds develop, use legally approved herbicides.
- B. No herbicide shall be used without the Owner prior consent. Apply in accordance with manufacturers' recommendations and a recommendation from a state licensed Pest Control Advisor. Use only herbicides in accordance with manufacturer's recommendations. If selective herbicides are used, extreme caution shall be observed so as not to damage any other plants. Spraying shall be done only under windless conditions, and after posting notification of intended spraying at least 24 hours in advance.
- C. Disease and Pest Control: Disease and insect damage shall be controlled by the use of fungicides and insecticides, subject to the prior consent of the Owner.
- D. Pruning:
 - 1. Trees: Prune trees to select and develop permanent scaffold branches; to eliminate narrow v-shaped branch forks that lack strength; to reduce potential toppling and wind damage by thinning out crowns; to maintain a natural appearance and to balance crown with roots. Prune only as directed by the Owner, or as required in an emergency situation.
 - 2. Shrubs: The objectives of shrub pruning are the same as for trees. Shrubs shall not be clipped into balled or boxed forms unless such is required by the design.
 - 3. All pruning cuts shall be made to lateral branches, buds or near flush with the trunk. "Stubbing" or heading cuts shall not be permitted.
 - 4. Only skilled workers shall perform pruning work in accordance with standard horticultural pruning practices. Remove from the project all pruned branches and material. Remove and replace any plant material excessively pruned or malformed resulting from improper pruning practices at no additional cost to the Owner.
- E. Staking & Guying: Stakes and guys shall remain in place through the maintenance period and shall be periodically inspected and adjusted by the contractor to prevent rubbing that causes bark wounds, loosen for proper growth or other appropriate reasons. Remove nursery stakes from trees.
- F. Protection: The contractor shall maintain protection of all planting areas until Final Acceptance. Damaged areas shall be repaired or replaced at the

contractor's expense. Contractor shall re-use the 6' high chain link fence that was used during the course of construction and locate it around all planting areas for the entire length of Landscape Maintenance Period.

3.8 IRRIGATION SYSTEM:

- A. Before beginning the maintenance program, the Contractor shall inspect all systems and report damage or incorrect operation to the Engineer/Inspector. The Contractor will be responsible for the operation of the irrigation system and maintenance of bubbler heads. During the maintenance period, the Contractor shall:
 - 1. Repair and adjust all bubblers to maintain proper delivery of water to each plant.
 - 2. Remove last bubbler from each system and flush the lines if required.
 - 3. Repair and replace any equipment damaged, at the Contractor's expense.
 - 4. Where the installed system does not function adequately, the Contractor shall irrigate the plants by other means until such time the irrigation system is functioning properly.

3.9 OWNER'S RESPONSIBILITY:

- A. Work installed under this contract that is damaged or stolen prior to Substantial Completion shall be repaired or replaced by the Contractor without cost to the Owner. After Substantial Completion and through the maintenance period, these damages and similar factors such as extensive litter, abuse and defacement shall be the Owner's responsibility to repair or replace and shall not be a part of this contract. No planting shall be guaranteed beyond the maintenance period, except as to conformance to specified species and variety, and except as to conditions specified under "Root Systems" of Planting, Section 32 90 00.

3.10 SUBSTANTIAL COMPLETION:

- A. Shall be deemed as the time all plantings are installed, and when all other work is satisfactorily completed (with the exception of minor items to be completed as noted upon a checklist compiled by the Engineer/Inspector). Maintenance period shall not commence until work is deemed substantially complete by the Engineer/Inspector.

3.11 FINAL REVIEW:

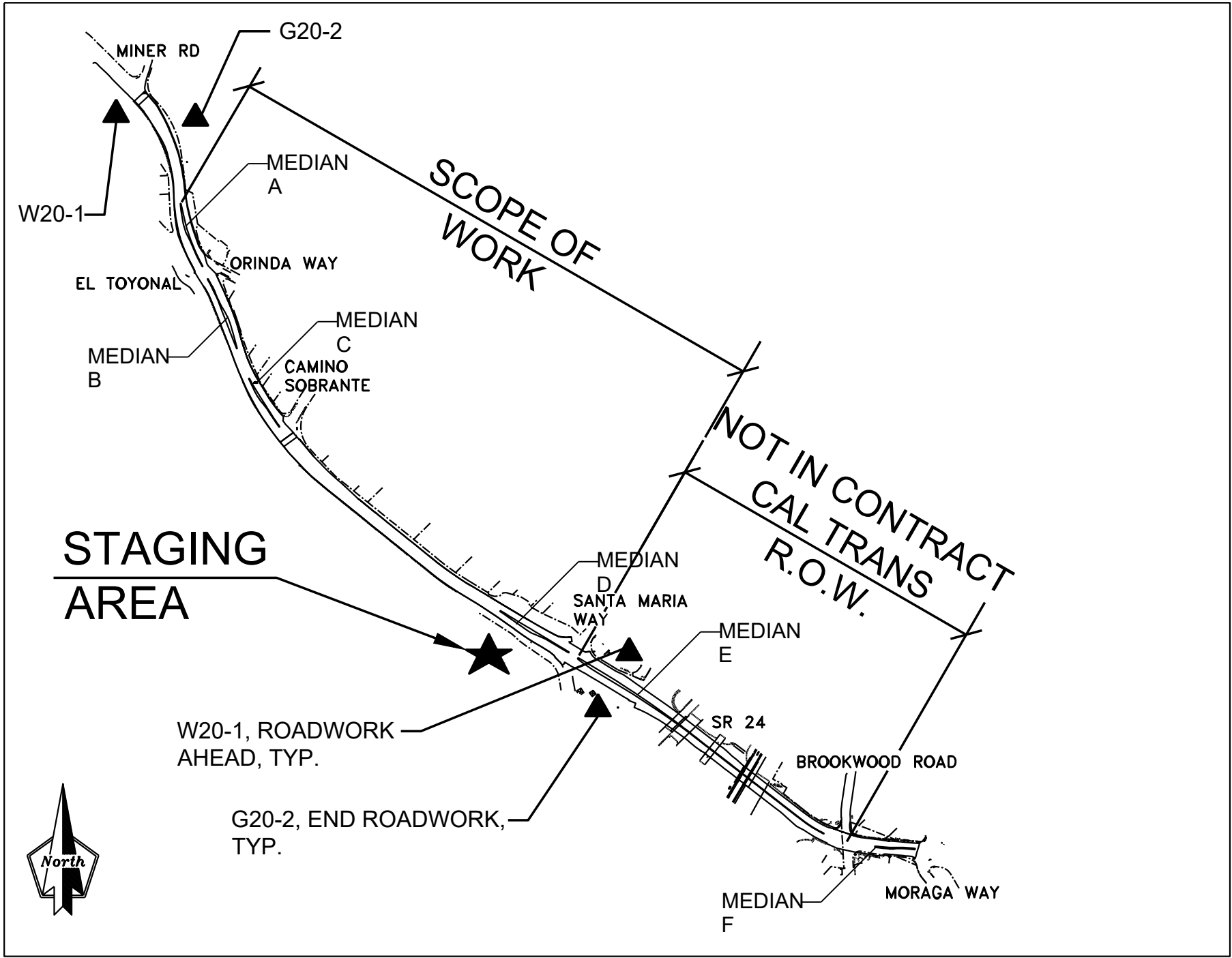
- A. Contractor shall request a final review of the project at least five working days in advance of the proposed date. Failure to request this notice shall automatically extend the date of completion. The maintenance period will continue until project is deemed complete.

3.12 GUARANTEE OF IRRIGATION SYSTEM

- A. The entire irrigation system installed by the Contractor shall be guaranteed against all defects and faults of material and workmanship for one year from date of acceptance by City Council without expense to the City. All material used shall carry a manufacturer's guarantee for a minimum of one year.

- B. Any settling of backfill trenches which may occur during the guarantee period shall be repaired to the Owner's satisfaction by the Contractor without expense to the City including the complete restoration of all damaged planted areas, plants, or other improvements of any kind.

END OF SECTION 32 93 00



PROJECT LOCATION MAP
NOT TO SCALE

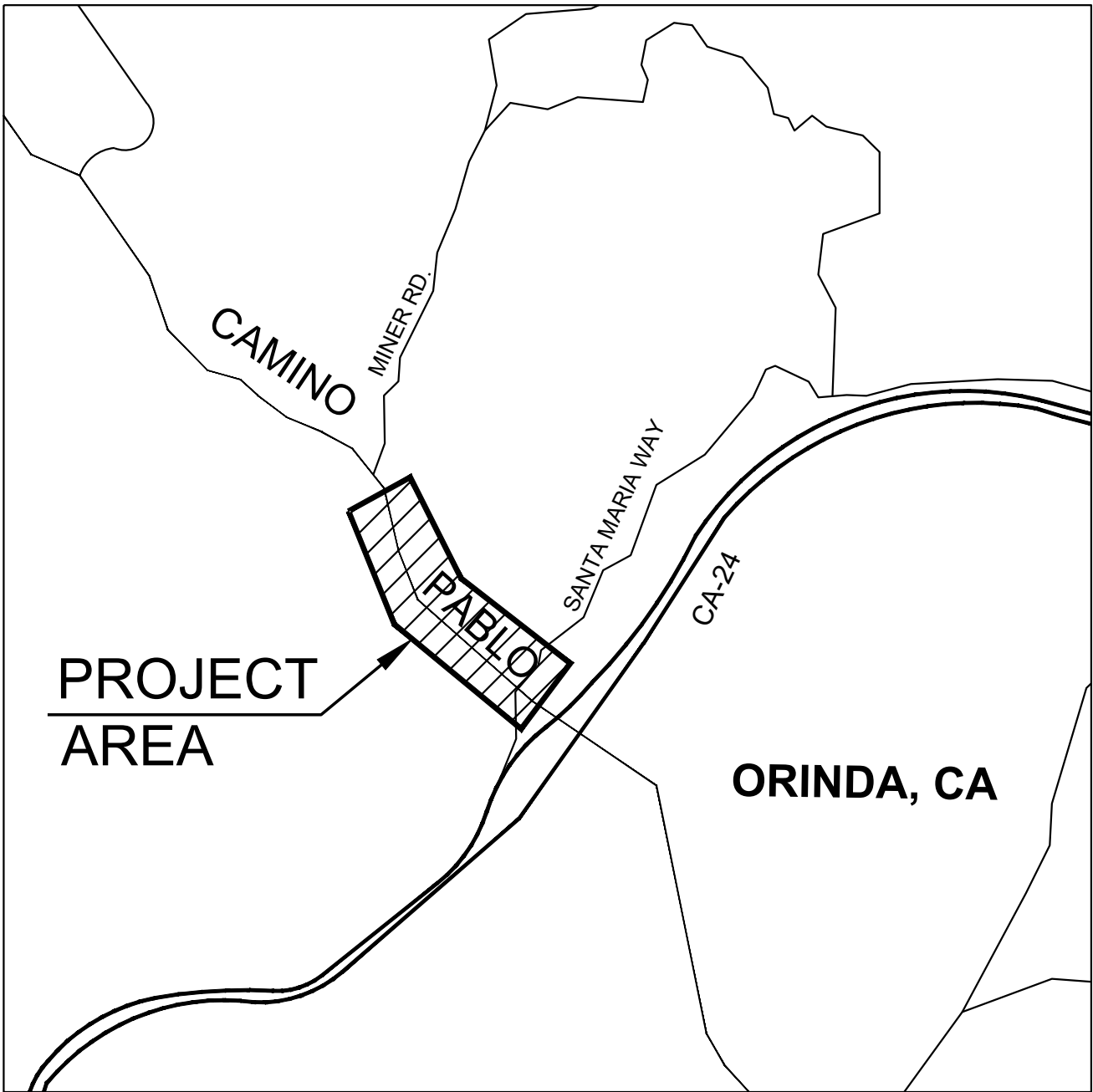
NOTES:

1. THE CONTRACTOR SHALL INSPECT THE PROJECT SITE PRIOR TO SUBMITTING A BID IN ORDER TO OBSERVE AND DETERMINE THE EXISTING JOB SITE CONDITIONS.
2. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT. THESE PLANS DO NOT INCLUDE COMPONENTS NECESSARY FOR CONSTRUCTION SAFETY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE FOR THE SAFETY OF ALL PERSONS AND PROPERTY DURING THE COURSE OF THE PROJECT.
3. THE CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE STATE CONSTRUCTION SAFETY ORDERS AND CAL/OSHA. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
4. LOCATIONS OF EXISTING UTILITIES ARE SHOWN BASED ON SCHEMATIC MAPPING PROVIDED BY THE UTILITY COMPANIES. THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES AND CALL UNDERGROUND SERVICE ALERT (U.S.A.) AT "811" AT LEAST TWO WORKING DAYS IN ADVANCE OF CONSTRUCTION TO FIELD LOCATE UTILITIES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF CONTRACTOR'S FAILURE TO VERIFY LOCATION OF MARKED EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION SHALL BE BORNE BY THE CONTRACTOR.
5. TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE THE CONTRACTOR'S RESPONSIBILITY. ALL TRAFFIC CONTROL AND DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" ISSUED BY THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, OR AS DIRECTED BY THE ENGINEER. LANE CLOSURES SHALL CONFORM TO STATE STANDARD PLAN T13.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO THE SITE, OR THE SURROUNDING AREA AS A RESULT OF THE CONTRACTOR'S WORK OR OPERATIONS. EXISTING FACILITIES THAT ARE DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SURVEY AND SETTING OF CONTROL, LINES AND GRADES FOR THIS PROJECT, SUBJECT TO INSPECTION AND APPROVAL OF THE ENGINEER.
8. THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSES AS SPECIFIED IN THE "NOTICE TO BIDDERS."
9. PROJECT PLANS ARE TO BE SUPPLEMENTED BY THE LATEST STATE STANDARD PLANS AND CONTRA COSTA COUNTY STANDARD PLANS, UNLESS OTHERWISE SPECIFIED IN THE PROJECT SPECIFICATIONS.

CITY OF ORINDA

CAMINO PABLO MEDIANS LANDSCAPE IMPROVEMENTS

ORINDA, CALIFORNIA
CITY PROJECT #4136

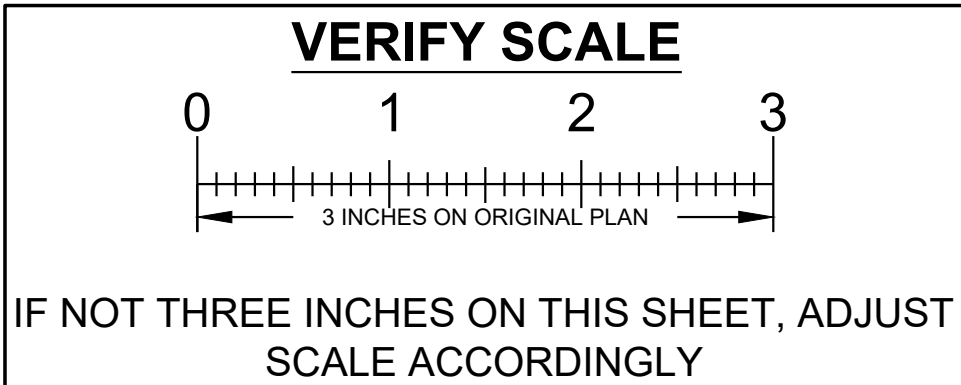


VICINITY MAP
NOT TO SCALE

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
L0.1	TITLE SHEET
L0.2	GENERAL NOTES
L0.3	LEGEND
L1.1	EXISTING CONDITIONS AND DEMOLITION PLAN: MEDIANS A, B, C & D
L2.1	IRRIGATION & PLANTING PLANS: MEDIAN A
L2.2	IRRIGATION & PLANTING PLANS: MEDIAN B
L2.3	IRRIGATION & PLANTING PLANS: MEDIAN C
L2.4	IRRIGATION & PLANTING PLANS: MEDIAN D
L3.1	IRRIGATION DETAILS
L4.1	LANDSCAPE & PLANTING DETAILS

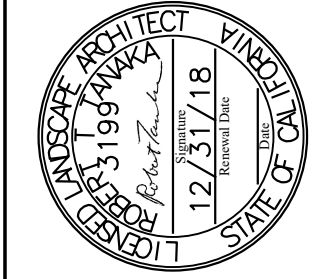
IN ADDITION TO THE ABBREVIATIONS AND SYMBOLS SHOWN, STANDARD ABBREVIATIONS AND SYMBOLS ARE AVAILABLE ON CONTRA COSTA COUNTY STANDARD PLAN CA01 AND CALTRANS STANDARD PLANS A10A THROUGH A10D.



TITLE SHEET

SCALE: AS NOTED
CITY PROJECT #4136

L0.1



REGISTERED LANDSCAPE ARCHITECT
DATE 07/30/18

DESIGNED: rt
DRAWN: nm
CHECKED: rt
DATE: 07-30-2018

REVIEWED AND APPROVED BY: *L.T.O.*
APPROVED By L. Theis at 1:40 pm, Aug 17, 2018
DATE

CAMINO PABLO MEDIANS:
LANDSCAPE IMPROVEMENTS

PLANTING PLAN GENERAL NOTES

- A. ALL UNDERGROUND UTILITIES SHALL BE LOCATED BEFORE START OF WORK.
- B. ALL GRADES SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO PLANTING OF ANY PLANT MATERIALS.
- C. LAYOUT TREES, SHRUBS AND GROUNDCOVERS AS SHOWN ON THE PLANS. LAYOUT OF PLANT MATERIALS, WHILE STILL IN CONTAINERS, SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION OF ANY PLANTS.
- D. REPAIR AND REPLACE ANY DAMAGED EXISTING PLANT MATERIAL AND TO RESTORE IT TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE. PROVIDE THE SAME PLANT MATERIALS IN MATURE SIZES.
- E. REFER TO SPECIFICATIONS FOR SOIL AMENDMENTS, FERTILIZER AND ADDITIONAL PLANTING INFORMATION.
- F. TREE, SHRUB AND GROUNDCOVER AREAS SHALL RECEIVE WEED CONTROL TREATMENT AS SPECIFIED IN THE SPECIFICATIONS.
- G. UPON RECEIPT OF "NOTICE TO PROCEED," ORDER PLANT MATERIAL TO INSURE ADEQUATE QUANTITIES AND SIZES OF PLANT MATERIAL WILL BE AVAILABLE. COPY OF THE NURSERY INVOICE SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE.
- H. ALL PLANTS SHALL BE OF THE GENUS, SPECIES, VARIETY, CULTIVAR, AND SIZES AS SHOWN ON THE PLANS. UNDER NO CONDITION, WILL THERE BE ANY SUBSTITUTION OF PLANTS OR SIZES FOR THOSE LISTED ON THE PLANS, EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF THE OWNER'S REPRESENTATIVE.
- I. ALL PLANTS SHALL BE TRUE TO NAME, AND ONE OF EACH BUNDLE OR LOT SHALL BE TAGGED WITH THE NAME AND SIZE OF THE PLANT, IN ACCORDANCE WITH THE STANDARDS OF PRACTICE RECOMMENDED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- J. AFTER PLANTING IS COMPLETE, FURNISH AND SPREAD THE SPECIFIED MULCH TO 3" MINIMUM DEPTH OVER ENTIRE PLANTED AREA. QUANTITY OF MULCH SHALL BE THE CONTRACTOR'S RESPONSIBILITY. SUBMIT SAMPLE PRIOR TO DELIVERY TO THE PROJECT SITE.
- K. CALIPER OF TREES SHALL BE MEASURED 6" ABOVE ROOT CROWN.
- L. QUANTITY OF PLANTS TO BE INSTALLED SHALL BE AS DESIGNATED NUMERICALLY ON THE PLANS. FINAL LOCATION OF TREES AND SHRUBS SHALL BE DETERMINED BY THE OWNER'S LANDSCAPE ARCHITECT DURING ONE SITE VISIT. UPON THE DELIVERY OF ALL PLANT MATERIAL SITE, AND AT LEAST 5 WORKING DAYS PRIOR TO THE SITE VISIT, REQUEST THE SITE VISIT. LAYOUT ALL PLANT MATERIAL IN ITS NURSERY CONTAINER AT OR NEARLY AT THE LOCATIONS DESIGNATED ON THE PLANS. LANDSCAPE ARCHITECT SHALL ADJUST LOCATIONS OR PROVIDE DIRECTIONS TO ADJUST PLANT LOCATIONS, BEFORE INSTALLATION OF PLANT MATERIAL OCCURS.
- M. PLANT AND STAKE ALL STANDARD TRUNK TREES PER DETAIL 1/L4.1.
- N. PLANT ALL SHRUBS PER DETAIL 2/L4.1.
- O. SPACING OF SHRUBS AND GROUNDCOVER SHALL BE PER DETAIL 3/L4.1.
- P. ADD ROOT BARRIER AT TREE PER DETAIL 4/L4.1.
- Q. BOULDERS. BOULDERS SHALL BE SUPPLIED BY QUALITY ROCK (WWW.QUALITY-ROCK.COM), CONTACT: MIKE McPHEE, PHONE: (209) 847-3370, EMAIL: INFO@QUALITY-ROCK.COM. BOULDERS SHALL BE 'MOSS ROCK' TYPE, BOULDERS SIZES SHALL BE AS INDICATED ON THE DRAWINGS FOR TYPICAL INSTALLATION, SEE DETAIL 6, SHEET L4.1.
- R. TREES IN CALTRANS RIGHT OF WAY ARE TO BE PLANTED A MINIMUM OF 100' FROM THE ENDS OF THE MEDIAN.
- S. ALL NEW PLANTING SHALL RECEIVE WEED CONTROL TREATMENT AS SPECIFIED IN THE SPECIFICATIONS.

ABBREVIATIONS

ASTM	AMERICAN SOCIETY OF TESTING MATERIALS
CL	CENTER LINE
EL	ELEVATION
FG	FINISH GRADE (ELEVATION)
FSG	FINISH SUBGRADE (ELEVATION)
HP	HIGH POINT
HT	HEIGHT
ICV	IRRIGATION CONTROL VALVE
ID	IDENTIFICATION
INV	INVERT
MAX	MAXIMUM
MED	CONCRETE MEDIAN
MIN	MINIMUM
PVC	POLYVINYL CHLORIDE
R	RIDGE
RCV	REMOTE CONTROL VALVE
SDR	STANDARD DIMENSION RATIO
TYP	TYPICAL
VIF	VERIFY IN FIELD
W/	WITH

IRRIGATION PLAN GENERAL NOTES

- A. THE NEW IRRIGATION SYSTEM WILL BE OPERATED USING POTABLE WATER. SEE DETAILS AND NOTES FOR ADDITIONAL REQUIREMENTS.
- B. BUILD THE PROPOSED IRRIGATION SYSTEM BASED ON THE INFORMATION PROVIDED ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE AND EFFECTIVE COVERAGE OF ALL PLANTS.
- C. VERIFY ALL EXISTING CONDITIONS. IF ANY DISCREPANCY EXISTS BETWEEN BID INFORMATION AND ACTUAL FIELD CONDITIONS, NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO ANY INSTALLATION.
- D. THE EXISTING STATIC WATER PRESSURE AT THE POINT OF CONNECTION IS APPROXIMATELY 53 PSI. PRIOR TO BEGINNING ANY IRRIGATION WORK, CONDUCT A FIELD TEST TO CONFIRM THE STATIC WATER PRESSURE AND FORWARD INFORMATION TO THE ENGINEER/INSPECTOR.
- E. POINT OF WATER CONNECTION. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THE CONNECTION AT THE DESIGNATE POINTS, INCLUDING NECESSARY MODIFICATIONS TO THE EXISTING CONDITIONS TO MAKE THE CONNECTION.
- F. THE NEW IRRIGATION SYSTEM SHALL BE OPERATED BY EXISTING CONTROLLERS AND LOW VOLTAGE WIRES.
- G. ALL WORK SHALL CONFORM TO LOCAL AND STATE CODES AND ORDINANCES. ALL IRRIGATION WORK SHALL CONFORM TO THE PLANS AND SPECIFICATIONS.
- H. ADDITIONAL CONTROL WIRES, IF REQUIRED, SHALL BE RED COLOR. ADDITIONAL COMMON OR GROUND WIRES IF REQUIRED SHALL BE WHITE. ANY UNUSED CONTROL WIRES LEADING FROM EXISTING VALVES TO CONTROLLER MUST BE SALVAGED AND STORED IN VALVE BOXES WITHIN THE MEDIAN.
- I. VALVE BOXES AND LID STILL BE PLASTIC, BY RAINBIRD, MODEL: VB-STD, WITH BOLT-DOWN LID. COLOR SHALL BE GREEN. SIZES SHALL BE AS REQUIRED TO FIT ALL COMPONENTS OF VALVE ASSEMBLY. LABEL EACH LID IRRIGATION AND INCLUDE THE TYPE OF VALVE THAT IS HOUSED INSIDE IT, SUCH AS, "IRRIGATION SHUT OFF VALVE" OR " IRRIGATION REMOTE CONTROL VALVE". LABEL SHALL BE PERMANENT AS DETERMINED BY THE OWNER'S REPRESENTATIVE.
- J. BUBBLER LAYOUT. THE FOLLOWING NOTES PERTAIN TO THE LAYOUT, INSTALLATION AND PIPING CONNECTIONS FOR BUBBLERS:
1. BUBBLERS ARE LAID OUT DIAGRAMMATICALLY. ADJUST FINAL LOCATION OF BUBBLERS BASED ON SITE CONDITIONS. COORDINATE LOCATION OF BUBBLERS WITH PLANTING PLAN.

2. INSTALL 1 BUBBLER FOR EACH 1 OR 5 GALLON PLANT. INSTALL 2 BUBBLERS FOR EACH 15 GALLON OR LARGER PLANT.
- L. COORDINATE ROUTING OF LATERAL LINE PIPES SO THAT THEY WILL NOT CONFLICT WITH NEW PLANTS OR BOULDERS LOCATED ON PLANTING PLAN.
- M. ENSURE THAT RECORD DOCUMENTS (OR AS-BUILT DRAWINGS) INDICATE THE ROUTING OF ALL LATERAL LINE PIPES BETWEEN BUBBLERS..
- O. ALL UNDERGROUND UTILITIES SHALL BE LOCATED BEFORE THE START OF WORK. REQUEST AND OBTAIN FROM OWNER ALL AS-BUILD OR RECORD DOCUMENTS THAT MAY IDENTIFY PROBABLE LOCATIONS OF UTILITIES.
- P. ALL IRRIGATION WIRE SPLICES SHALL BE PER SPECS.

EXISTING CONDITIONS AND DEMOLITION PLAN NOTES

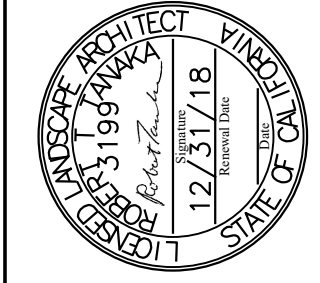
- A. WITHIN THE PROJECT AREA DEFINED ON THESE DRAWINGS, CLEAR AND GRUB MATERIAL AT ALL PLANTING AREAS PER THE SPECIFICATIONS.
- B. ALL SIGNS SHALL BE PRESERVED AND PROTECTED IN PLACE.
- C. ALL UNDERGROUND UTILITY AND SURFACE APPURTENANCES SHALL BE PRESERVED AND PROTECTED, UNLESS OTHERWISE NOTED.
- D. EXISTING UTILITY BOXES, VAULTS AND CLEANOUTS SHALL BE MODIFIED OR REPLACED AS REQUIRED TO CONFORM TO NEW IMPROVEMENTS. REFER TO DRAWINGS FOR ADDITIONAL REQUIREMENTS.
- E. GENERAL LIMIT OF WORK. CONTRACTOR SHALL REVIEW ALL DOCUMENTS TO DETERMINE THE GENERAL LIMIT OF WORK AND ASSOCIATED CONSTRUCTION FENCING PLACEMENT. INSTALL CONSTRUCTION FENCING AND GATES AT PROJECT WORK LIMITS FOR THE DURATION OF THE PROJECT. ADJUST FENCING AND GATES LOCATIONS AS NECESSARY. COORDINATE WITH THE ENGINEER.
- F. THE CONTRACTOR SHALL PERFORM ALL CLEARING, DEMOLITION, REMOVAL OF OBSTRUCTIONS AND SITE PREPARATIONS NECESSARY FOR THE PROPER EXECUTION OF ALL WORK SHOWN ON THESE PLANS AND AS DESCRIBED IN THE SPECIFICATIONS. LIMIT OF CLEARING, GRUBBING OR DEMOLITION IS APPROXIMATE AND MAY NEED ADJUSTMENT TO CONSTRUCT IMPROVEMENTS. COORDINATE EXTENT OF DEMOLITION OR CLEARING WITH SCOPE OF NEW WORK. NOT ALL DEMOLITION OR CLEARING AREAS ARE SHOWN ON THIS PLAN. REFER TO OTHER PLANS WHERE ADDITIONAL AREAS REQUIRE DEMOLITION IN ORDER TO INSTALL NEW IMPROVEMENTS.
- G. THE CONTRACTOR SHALL BE RESPONSIBLE UNDER THIS CONTRACT FOR REPAIRING AND REPLACING AT HIS OWN EXPENSE, ANY FLATWORK, UTILITIES, OR STRUCTURES DAMAGED OR DESTROYED BY HIS OPERATION. LIKEWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY AND ALL DAMAGES OCCURRING BY HIS OPERATION, ON ADJACENT PROPERTIES AND ANYWHERE OUTSIDE THE CONTRACT LIMIT LINES. THE DAMAGED ITEMS WILL BE RESTORED TO THEIR ORIGINAL CONDITION AND TO THE SATISFACTION OF THE ENGINEER.
- H. ALL ITEMS INDICATED TO BE REMOVED SHALL BE DISPOSED OF FROM THE PROJECT SITE, EXCEPT ITEMS INDICATED TO BE SALVAGED.
- I. SHOULD ANY ABANDONED PIPES BE BROKEN DURING CONSTRUCTION, CONTRACTOR SHALL REPAIR PIPE TO ELIMINATE ANY OPENINGS, AS DIRECTED BY THE ENGINEER.
- J. PROVIDE AND INSTALL EROSION CONTROL EQUIPMENT AND MATERIAL AS REQUIRED TO PREVENT STORM WATER FLOWING ONTO ADJACENT ROADWAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE PROVISIONS AS DETERMINED BY THE ENGINEER, FOR THE DURATION OF THE PROJECT.
- K. CONTRACTOR SHALL PROTECT AND PRESERVE ALL IRRIGATION CONTROL WIRES. ANY UN-USED WIRES SHALL BE PLACED IN A VALVE BOX. REPLACE ANY WIRES DAMAGED CONSTRUCTION. WHERE SPLICING IS REQUIRED, REFER TO IRRIGATION GENERAL NOTES AND SPECIFICATIONS.
- L. REMOVE ALL IRRIGATION HEADS, LATERAL LINE PIPES, REMOTE CONTROL VALVES AND ASSOCIATED VALVE BOXES.
- M. PRESERVE AND PROTECT ALL IRRIGATION SHUT-OFF VALVES AND QUICK COUPLER VALVES.
- N. EROSION CONTROL FIBER ROLLS. AT THE PERIMETER OF ALL PLANTING AREAS, INSTALL A CONTINUOUS LINE OF EROSION CONTROL FIBER ROLL.

GENERAL NOTES

L0.2

SCALE: AS NOTED

CITY PROJECT #4136



07/30/18

DATE

Robert Tancher

REGISTERED LANDSCAPE ARCHITECT

DESIGNED: rt

DRAWN: nm

CHECKED: rt

DATE: 07-30-2018

REVIEWED AND APPROVED BY:


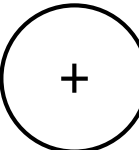


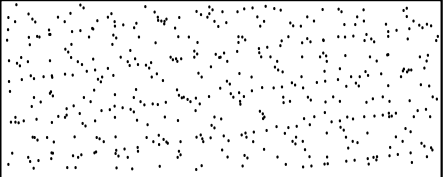
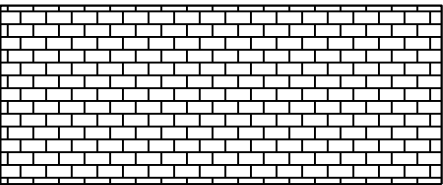


APPROVED

By L. Theis at 1:41 pm, Aug 17, 2018









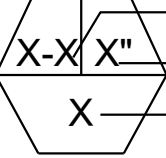
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CAMINO PABLO MEDIANS:
LANDSCAPE IMPROVEMENTS

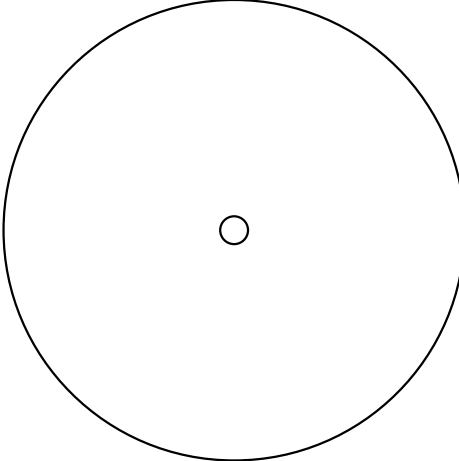
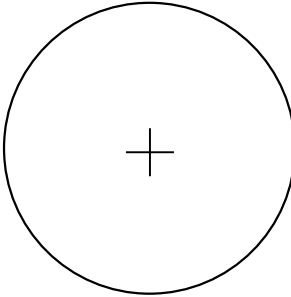

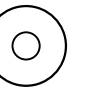

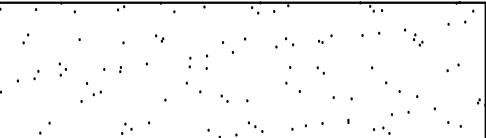



EXISTING CONDITIONS AND DEMOLITION PLAN LEGEND

	DEMOLISH REMOTE CONTROL VALVE AND VALVE BOX
	DEMOLISH TREE
	MAINLINE PIPE, PRESERVE AND PROTECT
	PVC LATERAL LINE, DEMOLISH UON. NOTE: NOT ALL SHOWN, VIF
	PLANTING AREA: CLEAR AND GRUB
	PAVING, PRESERVE AND PROTECT
	EXISTING CONTROLLER CONTROLLER DESIGNATION
	QUICK COUPLER

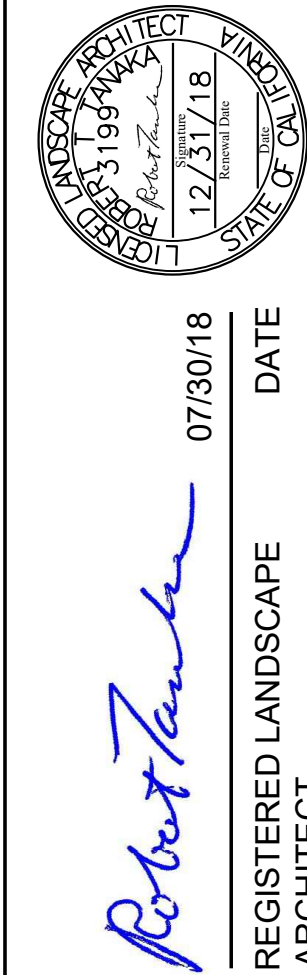
IRRIGATION LEGEND

SYMBOL	ITEM	MANUFACTURER/REMARKS
	POP-UP BUBBLER	TORO, PRESSURE COMPENSATING FLOOD BUBBLERS, MODEL NO. FB-25-PC, SEE DETAIL 7, SHEET L3.1.
	EXISTING MAIN LINE	
	EXISTING LATERAL LINE	
	LATERAL LINE	PVC, SCH 40, 3/4" SIZE MINIMUM AND AS NOTED ON PLAN.
	REMOTE CONTROL VALVE	HUNTER ICV, SIZE AS NOTED ON PLAN.
	SHUT OFF VALVE	NIBCO PC-FP600A-LF, SIZE PER MAIN LINE SIZE
	QUICK COUPLING VALVE	RAINBIRD MODEL 44 LRC QUICK COUPLING VALVE MOUNTED ON SCH. 60 PVC TRIPLE SWING JOINT
	EXISTING CONTROLLER CONTROLLER DESIGNATION	
	CONTROLLER-STATION NUMBER CONTROL VALVE SIZE GALLONS PER MINUTE THROUGH VALVE	

PLANTING LEGEND

SYMBOL	BOTANICAL NAME	COMMOM NAME	REMARKS	QTY	H2O
TREES					
	QUERCUS AGRIFOLIA	COAST LIVE OAK	24" BOX SIZE, 40FT MATURE SPREAD	13	VERY LOW
	ARBUTUS 'MARINA'	MARINA STRAWBERRY TREE	24" BOX SIZE, 25FT MATURE SPREAD	15	LOW
SHRUBS					
	ARCTOSTAPHYLOS 'PACIFIC MIST'	MANZANITA	5 GAL. SIZE, 6' HIGH X 10' WIDE MATURE SPREAD	37	LOW
	NERIUM OLEANDER 'WHITE SANDS DWARF'	WHITE SANDS DWARF OLEANDER	5 GAL. SIZE, 4' HIGH X 4' WIDE MATURE SPREAD	79	LOW
	LOMANDRA LONGIFOLIA	DWARF MAT RUSH	5 GAL. SIZE, 36" MATURE SPREAD	119	LOW
GROUNDCOVER					
		MULCH, 3" MIN. LAYER	FINE GRADE PRIOR TO PLACING MULCH		
BOULDERS					
	BOULDER - TYPE A: 12" WIDE X 15" HIGH X 18" LONG, ± 2". FOR QUALITY ROCK INFORMATION, SEE NOTE Q ON PLANTING PLAN GENERAL NOTES				
	BOULDER - TYPE B: 15" WIDE X 20" HIGH X 24" LONG, ± 2". FOR QUALITY ROCK INFORMATION, SEE NOTE Q ON PLANTING PLAN GENERAL NOTES				
	BOULDER - TYPE C: 24" WIDE X 32" HIGH X 36" LONG, ± 2". FOR QUALITY ROCK INFORMATION, SEE NOTE Q ON PLANTING PLAN GENERAL NOTES				

LEGEND



DESIGNED: rt
DRAWN: nm
CHECKED: rt
DATE: 07-30-2018

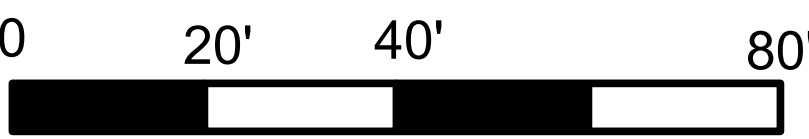
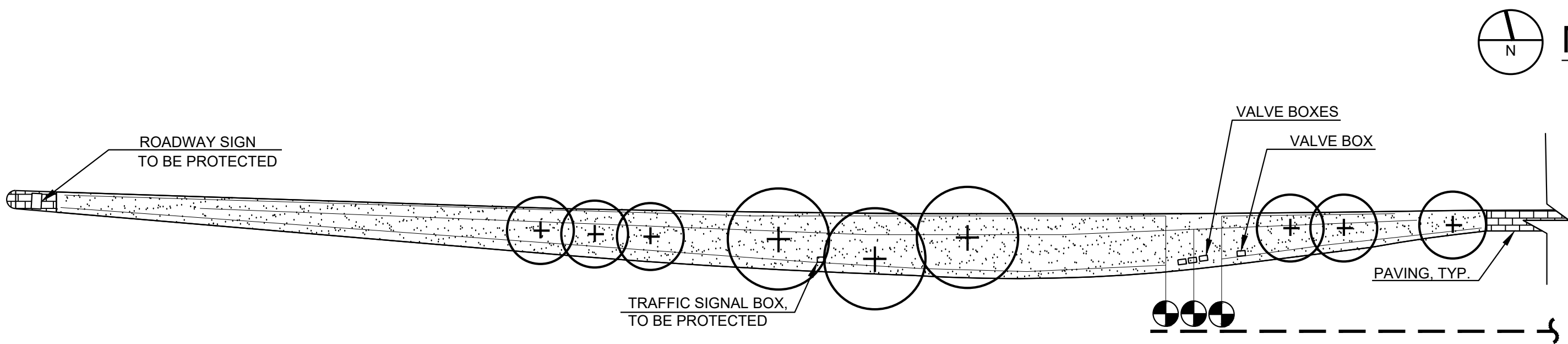
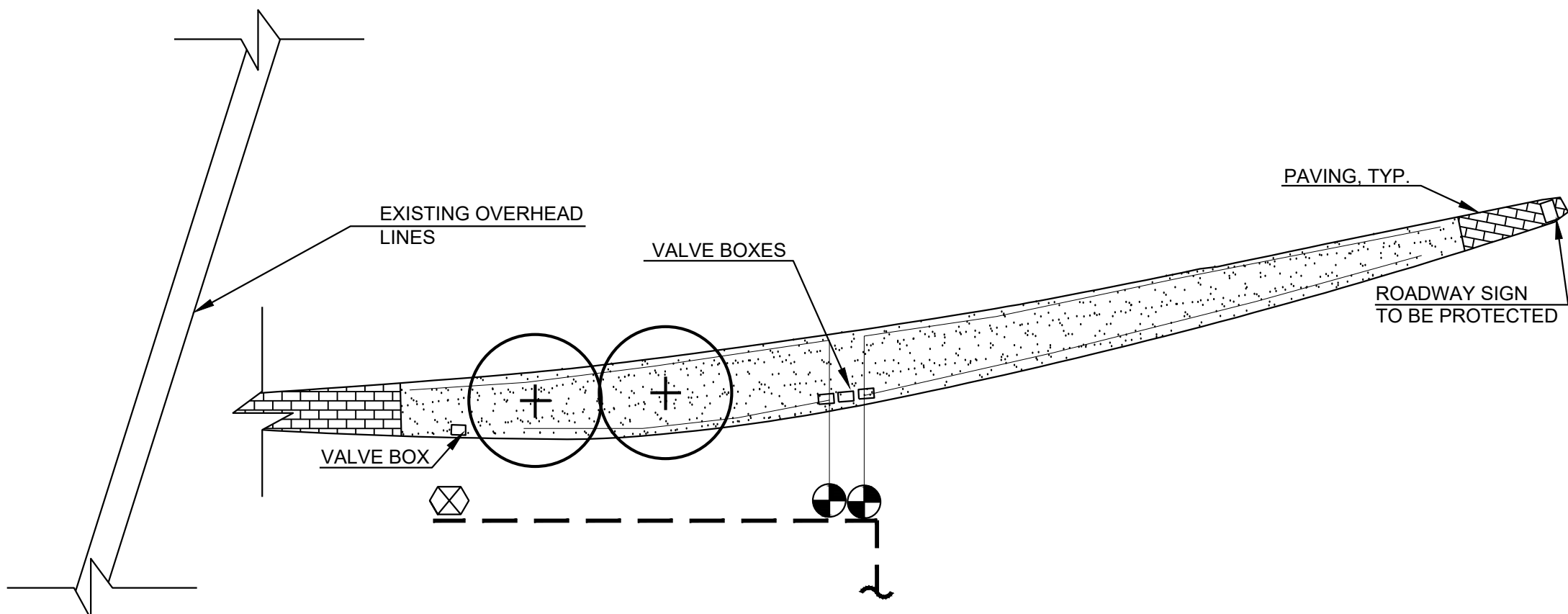
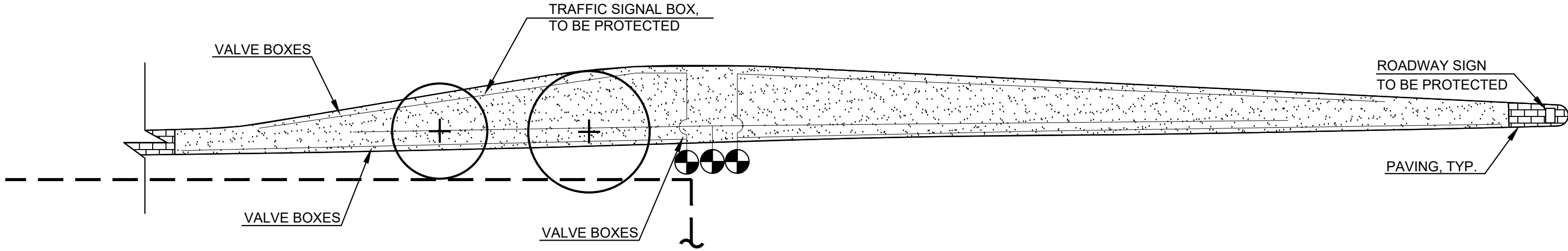
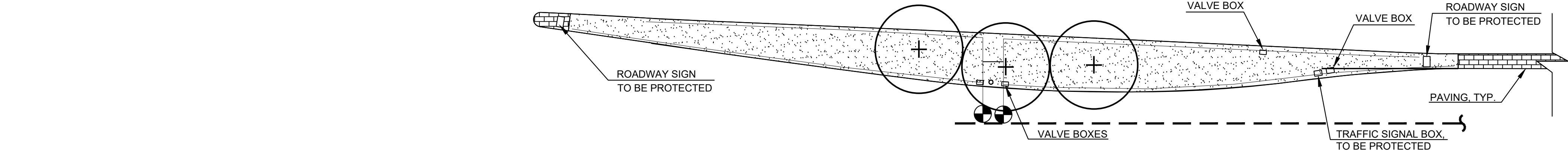
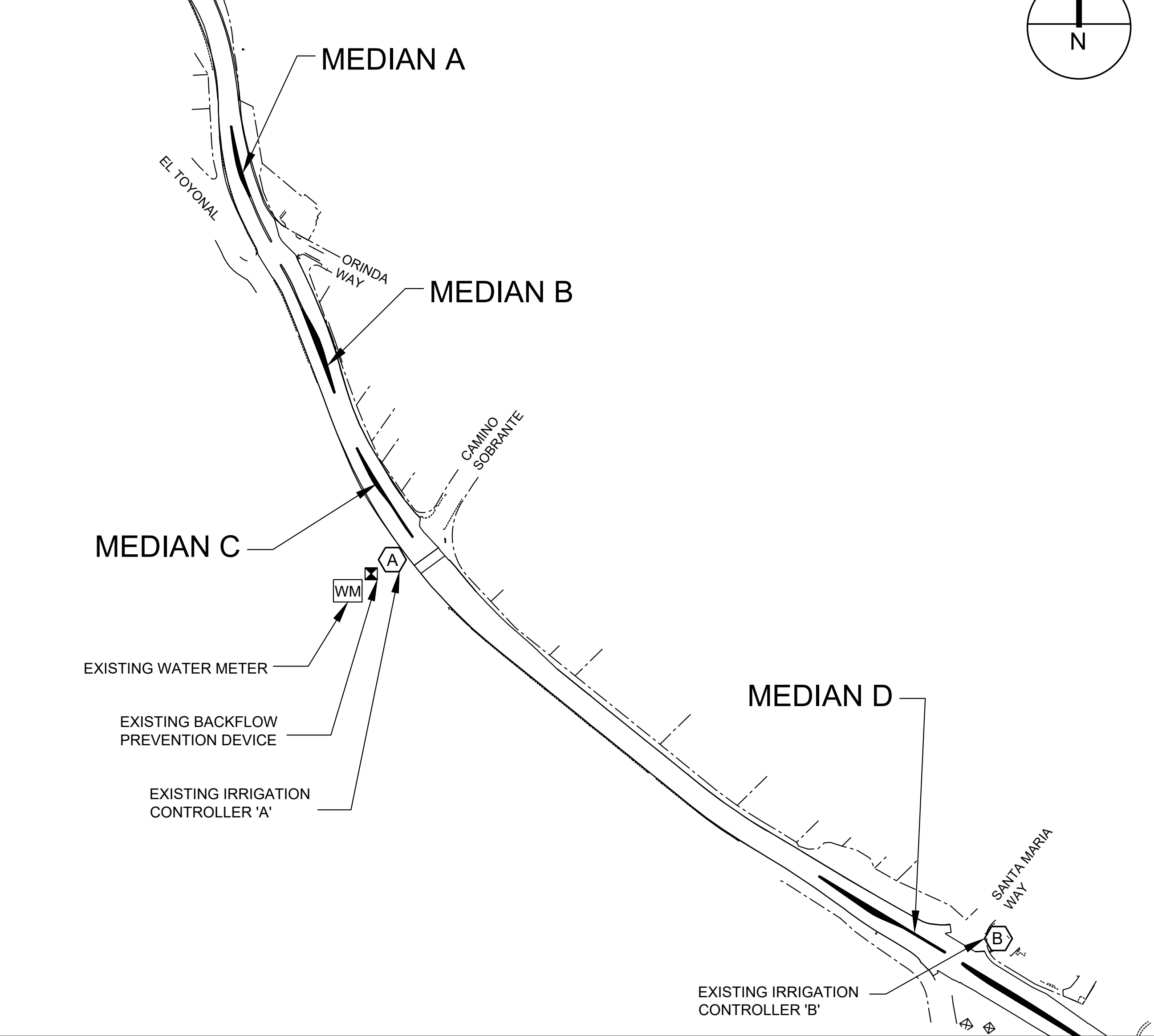
REVIEWED AND APPROVED BY:
APPROVED
By L. Theis at 1:41 pm, Aug 17, 2018
DATE

CAMINO PABLO MEDIANS:
LANDSCAPE IMPROVEMENTS

SCALE: AS NOTED
CITY PROJECT #4136

L0.3

KEY MAP



MEDIAN A

MEDIAN B

MEDIAN C

MEDIAN D

EXISTING CONDITIONS AND
DEMOLITION PLAN: MEDIANS
A, B, C & D

DESIGNED:rt

DRAWN:nm

CHECKED:rt

DATE:07-30-2018

REGISTERED LANDSCAPE
ARCHITECT

07/30/18

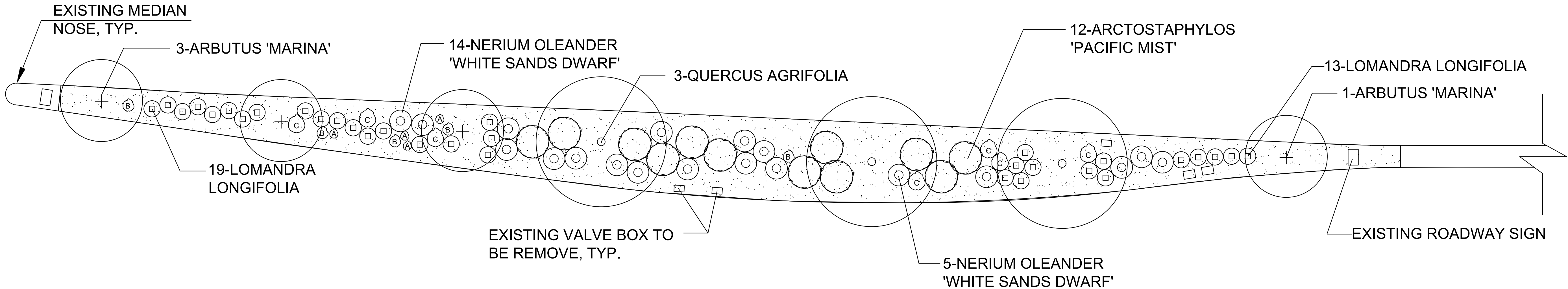
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APPROVED
By L. Theis at 1:42 pm, Aug 17, 2018

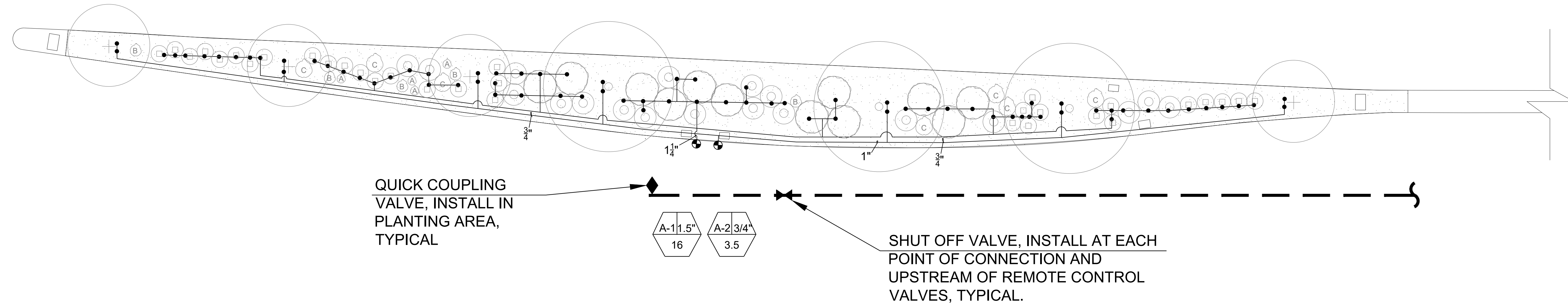
REVIEWED AND APPROVED BY:

SCALE: 1" = 20'
CITY PROJECT #4136

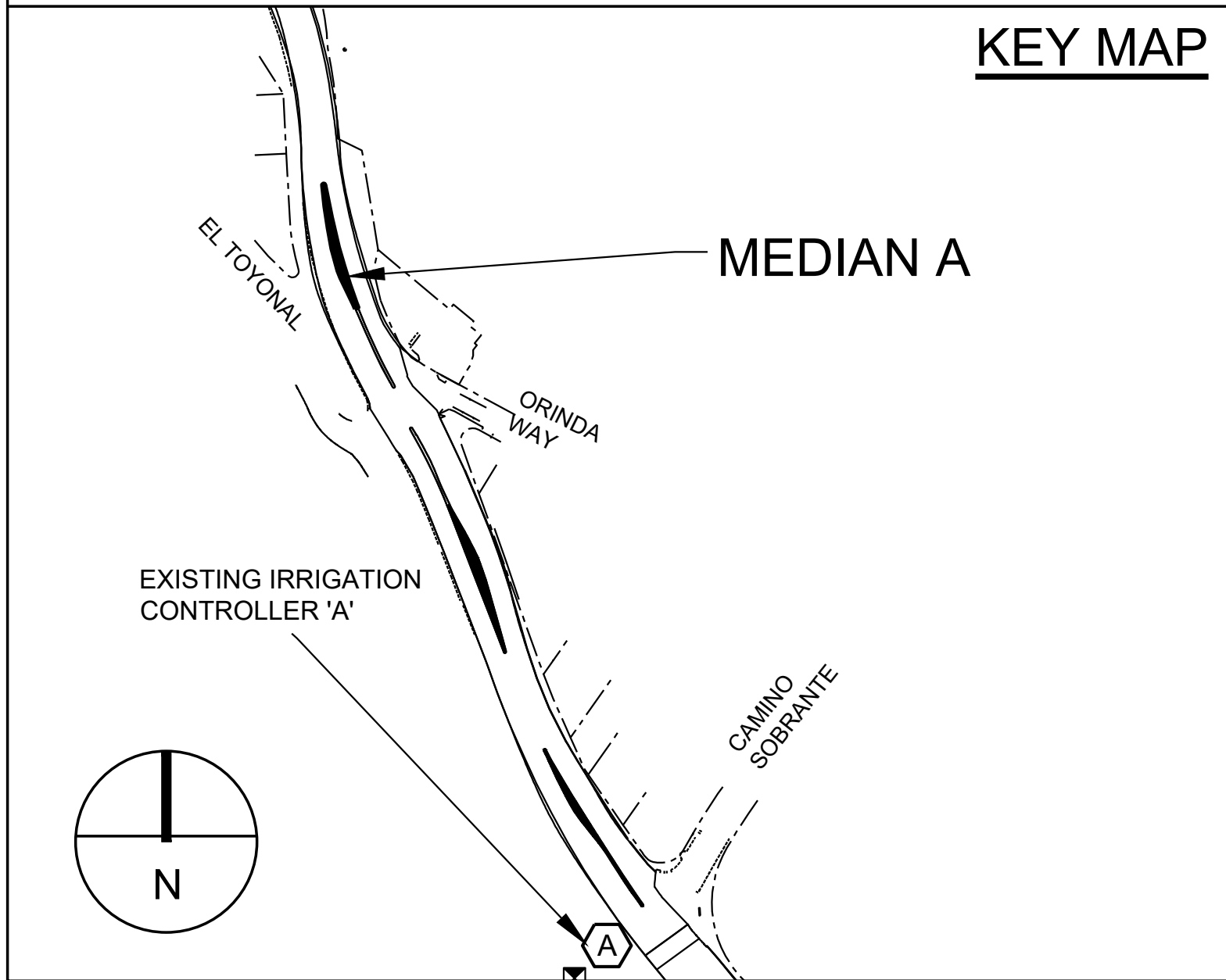
CAMINO PABLO MEDIANS:
LANDSCAPE IMPROVEMENTS



PLANTING PLAN



IRRIGATION PLAN



KEY MAP

HYDROZONE INFORMATION TABLE

HYDROZONE	ZONE OR VALVE	IRRIGATION METHOD	AREA (SQ. FT)	% OF LANDSCAPE AREA
LW	A-1 & A-2	BUBBLER	2,633	29%
LW	A-3 & A-4	BUBBLER	2,850	31%
LW	A-5 & A-6	BUBBLER	1,416	15%
LW	B-1 & B-2	BUBBLER	2,322	25%

HYDROZONE
HW - HIGH WATER USE PLANTS
MW - MODERATE WATER USE PLANTS
LW - LOW WATER USE PLANTS

WATER BUDGET CALCULATIONS

MAXIMUM APPLIED WATER ALLOWANCE (MAWA)
THE PROJECT'S MAXIMUM APPLIED WATER ALLOWANCE SHALL BE CALCULATED USING THIS EQUATION:
 $MAWA = (ET_o)(0.62)[(0.45 \times LA) + (0.3 \times SLA)]$
WHERE:
MAWA = MAXIMUM APPLIED WATER ALLOWANCE (GALLONS PER YEAR)
 $ET_o = 44.9$; ET_o OF MORAGA IN REFERENCE EVAPOTRANSPIRATION FROM APPENDIX A (INCHES PER YEAR)
 $0.45 = ET$ ADJUSTMENT FACTOR (ETAF) (NON-RESIDENTIAL)
 $LA =$ LANDSCAPED AREA INCLUDES SPECIAL LANDSCAPE AREA (SQUARE FEET)
 $0.62 =$ CONVERSION FACTOR (TO GALLONS PER SQUARE FOOT)
 $SLA =$ PORTION OF THE LANDSCAPE AREA IDENTIFIED AS SPECIAL LANDSCAPE AREA (SQUARE FEET)
MAXIMUM APPLIED WATER ALLOWANCE = 115,479 GALLONS PER YEAR

HYDROZONE	PLANT WATER USE TYPE	PLANT FACTOR	HYDROZONE AREA (HA) (SQUARE FEET)	PF x HA (SQUARE FEET)
1 (MEDIAN A)	LOW	0.2	2,633	527
2 (MEDIAN B)	LOW	0.2	2,850	570
3 (MEDIAN C)	LOW	0.2	1,416	283
3 (MEDIAN D)	LOW	0.2	2,322	464
TOTAL			9,221	1,844

ESTIMATED TOTAL WATER USE
 $ETWU = (ET_o)(0.62)[(PF \times HA)(IE) + (SLA)]$
WHERE:
 $ETWU =$ ESTIMATED TOTAL WATER USE PER YEAR (GALLONS PER YEAR)
 $ET_o =$ REFERENCE EVAPOTRANSPIRATION (INCHES PER YEAR)
 $PF =$ PLANT FACTOR FROM WUCOLS (SEE DEFINITIONS)
 $HA =$ HYDROZONE AREA (HIGH, MEDIUM, AND LOW WATER USE AREAS) (SQUARE FEET)
 $SLA =$ SPECIAL LANDSCAPE AREA (SQUARE FEET)
 $0.62 =$ CONVERSION FACTOR (TO GALLONS PER SQUARE FOOT)
 $IE =$ IRRIGATION EFFICIENCY (0.81 FOR DRIP)
ESTIMATED TOTAL WATER USE = 83,369 GALLONS PER YEAR

IRRIGATION & PLANTING
PLANS: MEDIAN A

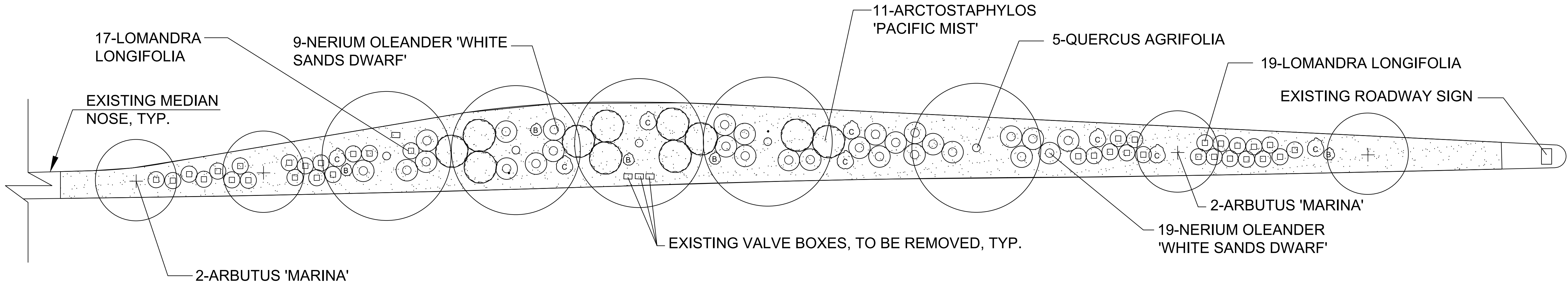
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CITY PROJECT #4136

L2.1

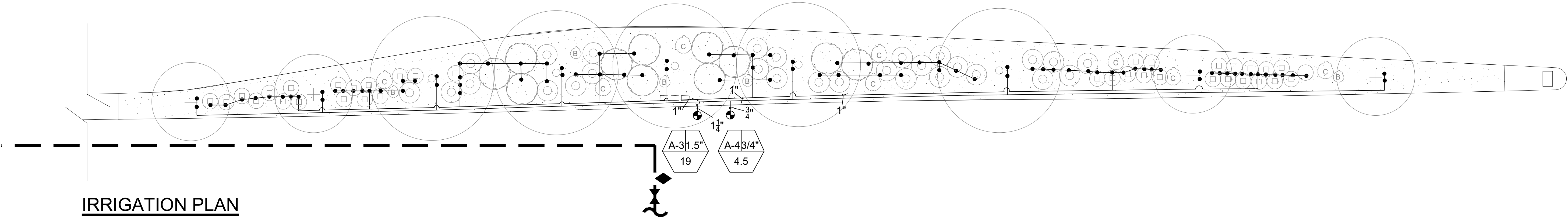
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DRAWN: nm
CHECKED: rt
DATE: 07-30-2018
REGISTERED LANDSCAPE ARCHITECT
07/30/18
12/31/18
STATE OF CALIFORNIA
ARCHITECT

APPROVED
By L. Theis at 1:42 pm, Aug 17, 2018
REVIEWED AND APPROVED BY:
DATE

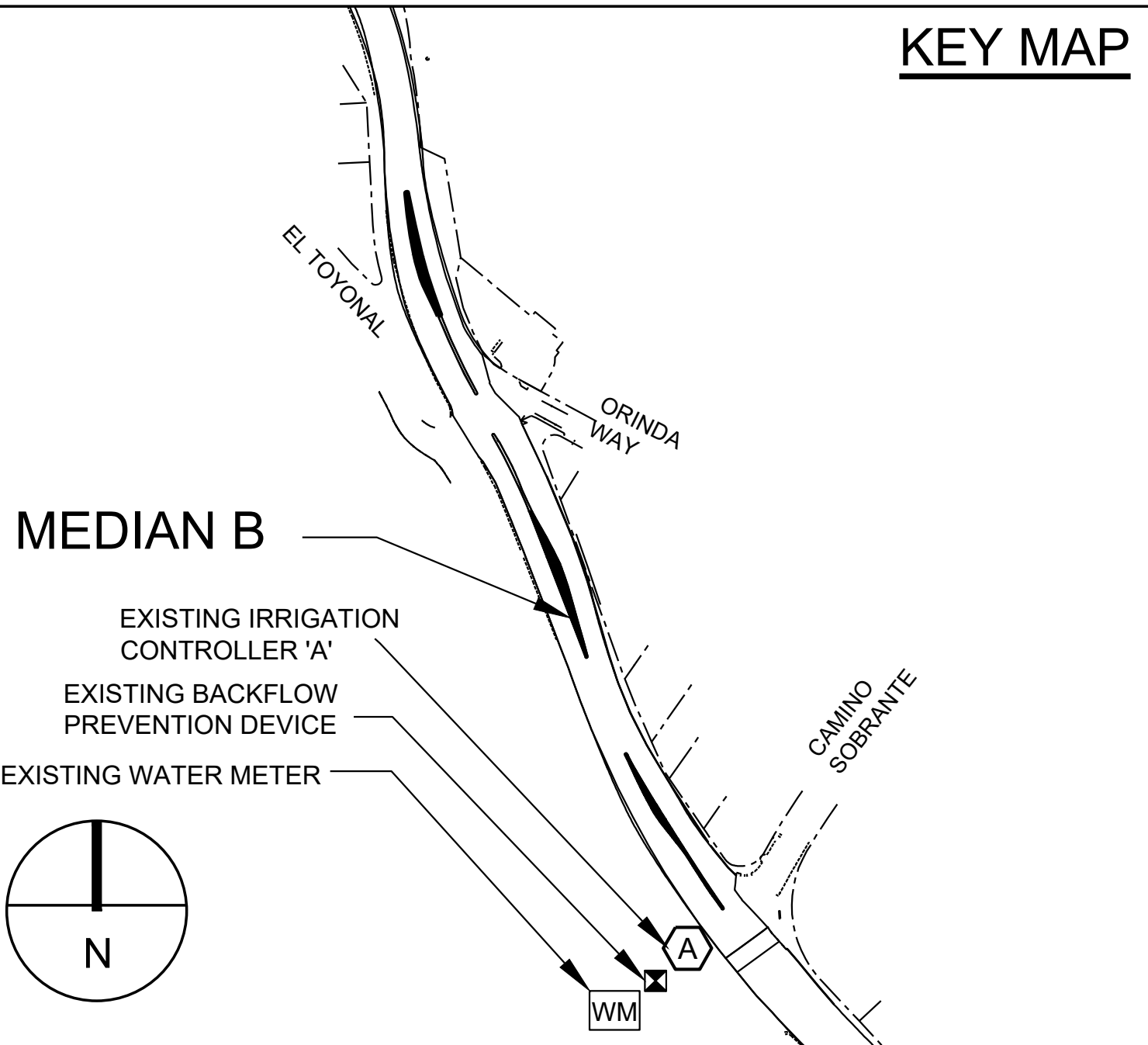
CAMINO PABLO MEDIANS:
LANDSCAPE IMPROVEMENTS



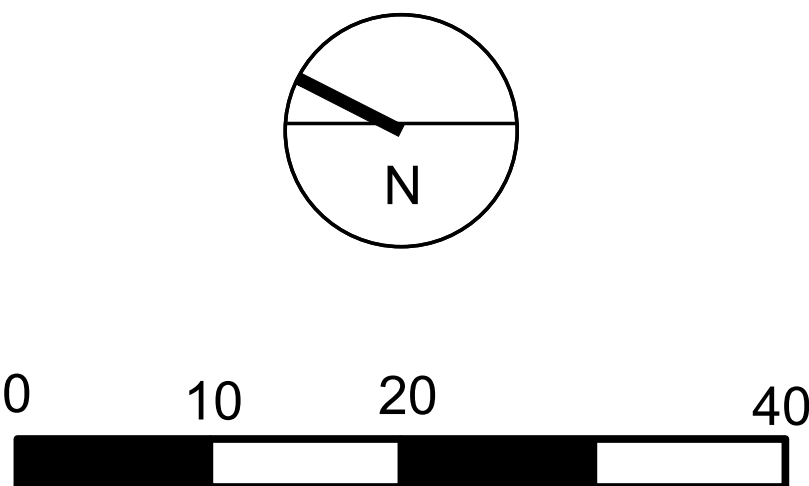
PLANTING PLAN



IRRIGATION PLAN



KEY MAP



HYDROZONE INFORMATION TABLE

HYDROZONE	ZONE OR VALVE	IRRIGATION METHOD	AREA (SQ. FT)	% OF LANDSCAPE AREA
LW	A-1 & A-2	BUBBLER	2,633	29%
LW	A-3 & A-4	BUBBLER	2,850	31%
LW	A-5 & A-6	BUBBLER	1,416	15%
LW	B-1 & B-2	BUBBLER	2,322	25%

HYDROZONE
HW - HIGH WATER USE PLANTS
MW - MODERATE WATER USE PLANTS
LW - LOW WATER USE PLANTS

WATER BUDGET CALCULATIONS

MAXIMUM APPLIED WATER ALLOWANCE (MAWA)
THE PROJECT'S MAXIMUM APPLIED WATER ALLOWANCE SHALL BE CALCULATED USING THIS EQUATION:
 $MAWA = (ET_0)(0.62)((0.45 \times LA) + (0.3 \times SLA))$
WHERE:
MAWA = MAXIMUM APPLIED WATER ALLOWANCE (GALLONS PER YEAR)
 $ET_0 = 44.9 \times ET_0$ OF MORAGA IN REFERENCE EVAPOTRANSPIRATION FROM APPENDIX A (INCHES PER YEAR)
 $0.45 = ET$ ADJUSTMENT FACTOR (ETAF) (NON-RESIDENTIAL)
LA = LANDSCAPED AREA INCLUDES SPECIAL LANDSCAPE AREA (SQUARE FEET)
 $0.62 =$ CONVERSION FACTOR (TO GALLONS PER SQUARE FOOT)
SLA = PORTION OF THE LANDSCAPE AREA IDENTIFIED AS SPECIAL LANDSCAPE AREA (SQUARE FEET)
MAXIMUM APPLIED WATER ALLOWANCE = 115,478 GALLONS PER YEAR

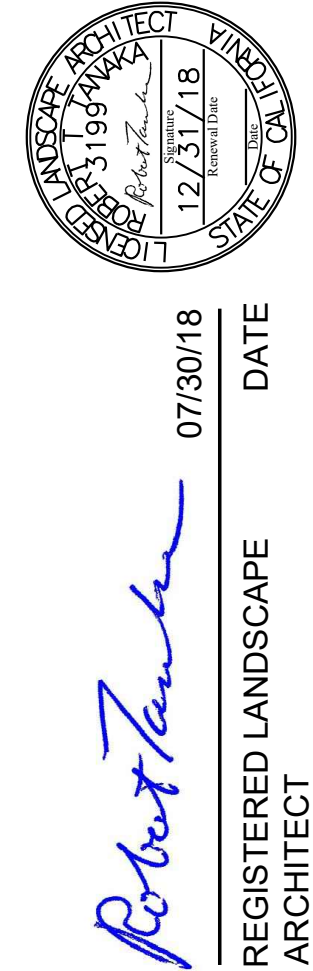
HYDROZONE	PLANT WATER USE TYPE	PLANT FACTOR	HYDROZONE AREA (HA) (SQUARE FEET)	PF x HA (SQUARE FEET)
1 (MEDIAN A)	LOW	0.2	2,633	527
2 (MEDIAN B)	LOW	0.2	2,850	570
3 (MEDIAN C)	LOW	0.2	1,416	283
3 (MEDIAN D)	LOW	0.2	2,322	464
TOTAL			9,221	1,844

ESTIMATED TOTAL WATER USE
 $ETWU = (ET_0)((PF \times HA)(IE) + (SLA))$
WHERE:
ETWU = ESTIMATED TOTAL WATER USE PER YEAR (GALLONS PER YEAR)
 $ET_0 =$ REFERENCE EVAPOTRANSPIRATION (INCHES PER YEAR)
PF = PLANT FACTOR FROM WUCOLS (SEE DEFINITIONS)
HA = HYDROZONE AREA (HIGH, MEDIUM, AND LOW WATER USE AREAS) (SQUARE FEET)
SLA = SPECIAL LANDSCAPE AREA (SQUARE FEET)
 $0.62 =$ CONVERSION FACTOR (TO GALLONS PER SQUARE FOOT)
IE = IRRIGATION EFFICIENCY (0.81 FOR DRIP)
ESTIMATED TOTAL WATER USE = 83,389 GALLONS PER YEAR

IRRIGATION & PLANTING
PLANS: MEDIAN B

SCALE: 1" = 10'
CITY PROJECT #4136

CAMINO PABLO MEDIANS:
LANDSCAPE IMPROVEMENTS



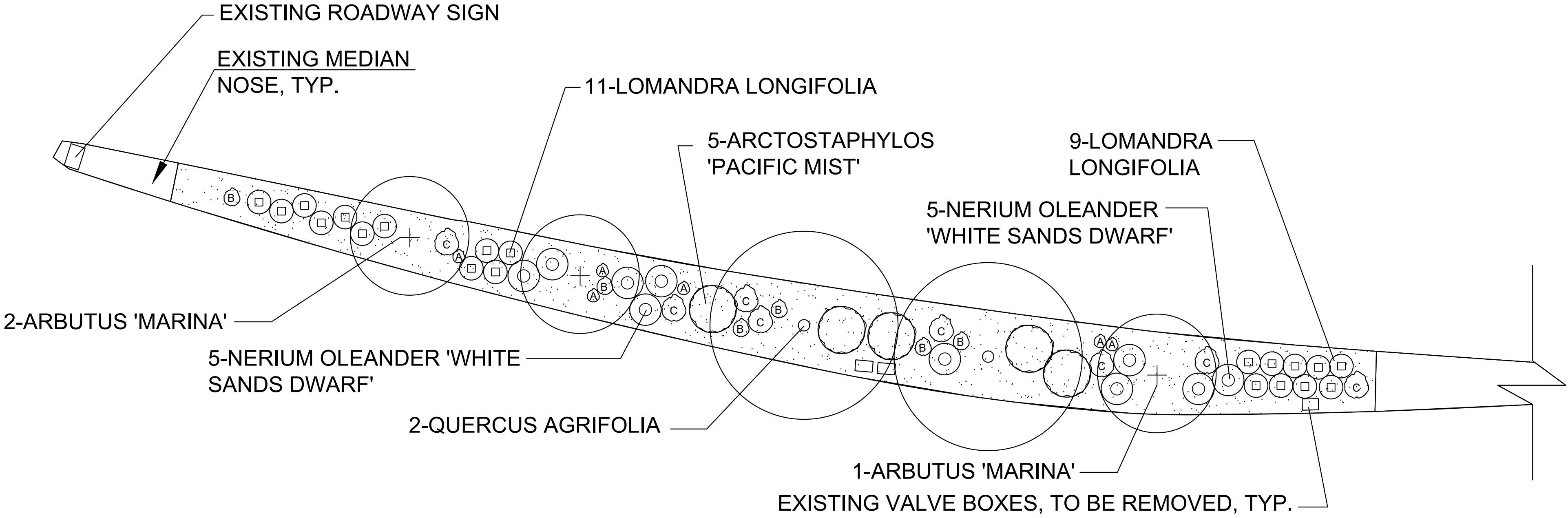
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DRAWN: nm
CHECKED: rt
DATE: 07-30-2018

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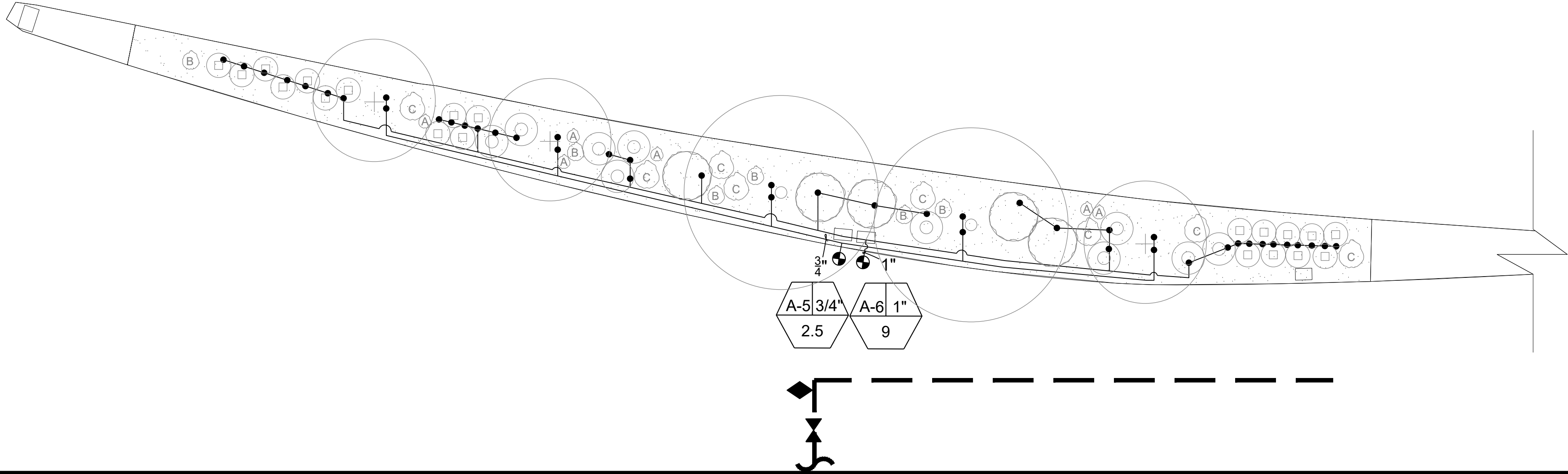
APPROVED
By L. Theis at 1:43 pm, Aug 17, 2018

DATE

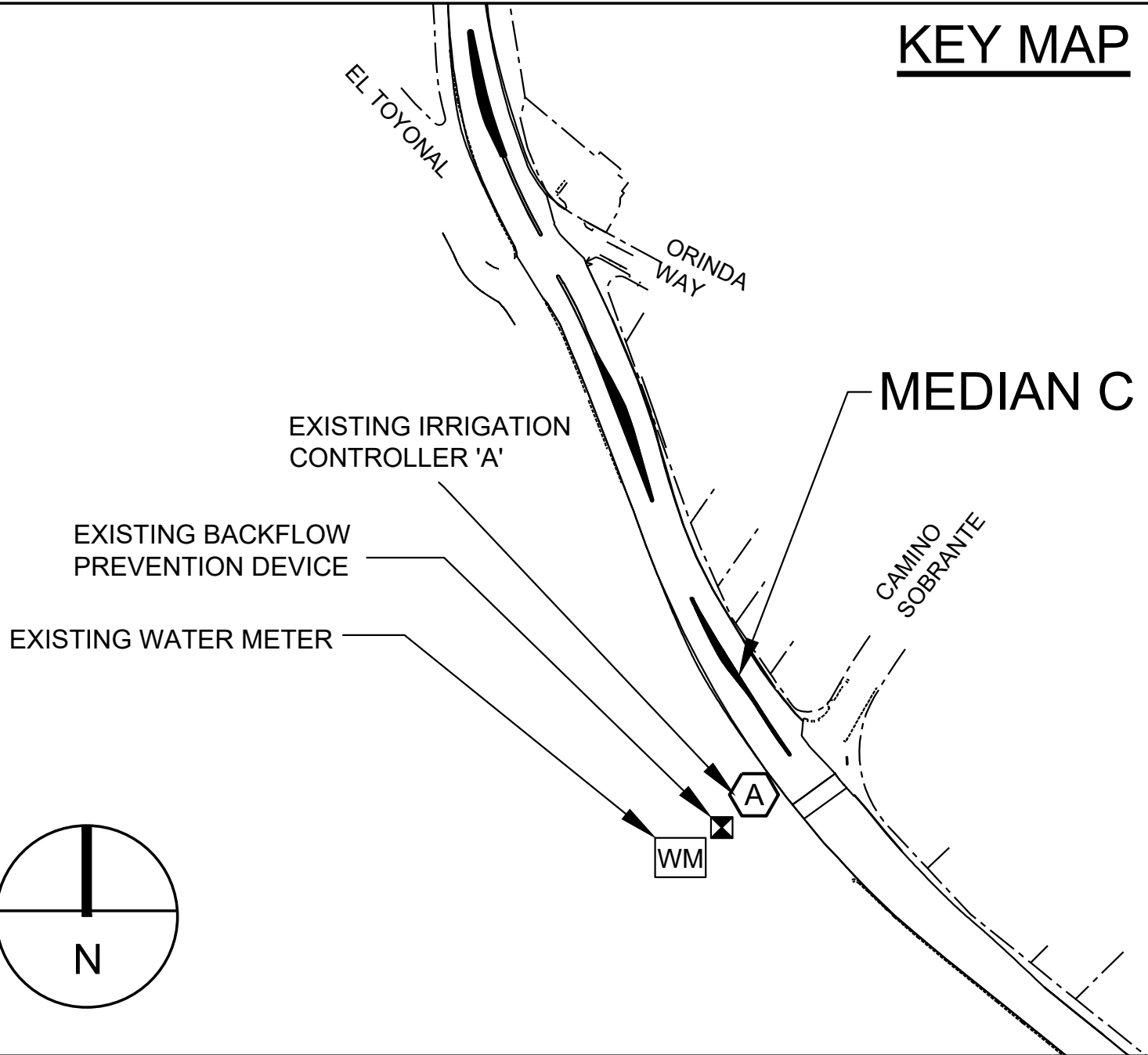
PLANTING PLAN



IRRIGATION PLAN



KEY MAP



HYDROZONE INFORMATION TABLE

HYDROZONE	ZONE OR VALVE	IRRIGATION METHOD	AREA (SQ. FT)	% OF LANDSCAPE AREA
LW	A-1 & A-2	BUBBLER	2,633	29%
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LW	A-5 & A-6	BUBBLER	1,416	15%
LW	B-1 & B-2	BUBBLER	2,322	25%

HYDROZONE
HW - HIGH WATER USE PLANTS
MW - MODERATE WATER USE PLANTS
LW - LOW WATER USE PLANTS

WATER BUDGET CALCULATIONS

MAXIMUM APPLIED WATER ALLOWANCE (MAWA)
THE PROJECT'S MAXIMUM APPLIED WATER ALLOWANCE SHALL BE CALCULATED USING THIS EQUATION:
 $MAWA = (ETO)(0.62)((0.45 \times LA) + (0.3 \times SLA))$
WHERE:
MAWA = MAXIMUM APPLIED WATER ALLOWANCE (GALLONS PER YEAR)
ETO = 44.9: ETO OF MORAGA IN REFERENCE EVAPOTRANSPIRATION FROM APPENDIX A (INCHES PER YEAR)
0.45 = ET ADJUSTMENT FACTOR (ETAF) (NON-RESIDENTIAL)
LA = LANDSCAPED AREA INCLUDES SPECIAL LANDSCAPE AREA (SQUARE FEET)
0.62 = CONVERSION FACTOR (TO GALLONS PER SQUARE FOOT)
SLA = PORTION OF THE LANDSCAPE AREA IDENTIFIED AS SPECIAL LANDSCAPE AREA (SQUARE FEET)
MAXIMUM APPLIED WATER ALLOWANCE = 115,479 GALLONS PER YEAR

HYDROZONE	PLANT WATER USE TYPE	PLANT FACTOR	HYDROZONE AREA (HA) (SQUARE FEET)	PF x HA (SQUARE FEET)
1 (MEDIAN A)	LOW	0.2	2,633	527
2 (MEDIAN B)	LOW	0.2	2,850	570
3 (MEDIAN C)	LOW	0.2	1,416	283
3 (MEDIAN D)	LOW	0.2	2,322	464
TOTAL			9,221	1,844

ESTIMATED TOTAL WATER USE
 $ETWU = (ETO)(0.62)((PF \times HA)/(IE) + (SLA))$
WHERE:
ETWU = ESTIMATED TOTAL WATER USE PER YEAR (GALLONS PER YEAR)
ETO = REFERENCE EVAPOTRANSPIRATION (INCHES PER YEAR)
PF = PLANT FACTOR FROM WUCOLS (SEE DEFINITIONS)
HA = HYDROZONE AREA [HIGH, MEDIUM, AND LOW WATER USE AREAS] (SQUARE FEET)
SLA = SPECIAL LANDSCAPE AREA (SQUARE FEET)
0.62 = CONVERSION FACTOR (TO GALLONS PER SQUARE FOOT)
IE = IRRIGATION EFFICIENCY (0.81 FOR DRIP)
ESTIMATED TOTAL WATER USE = 63,360 GALLONS PER YEAR

IRRIGATION & PLANTING
PLANS: MEDIAN C

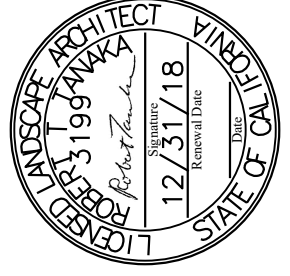
SCALE: 1" = 10'
CITY PROJECT #4136

CAMINO PABLO MEDIANS:
LANDSCAPE IMPROVEMENTS

APPROVED
By L. Theis at 1:43 pm, Aug 17, 2018

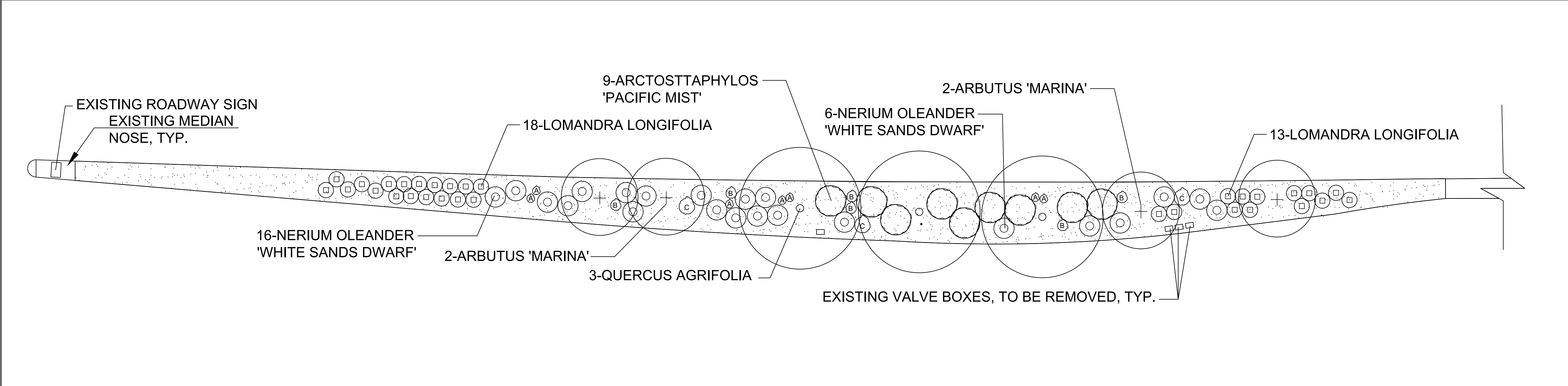
REVIEWED AND APPROVED BY:

DESIGNED: rt
DRAWN: nm
CHECKED: rt
DATE: 07-30-2018

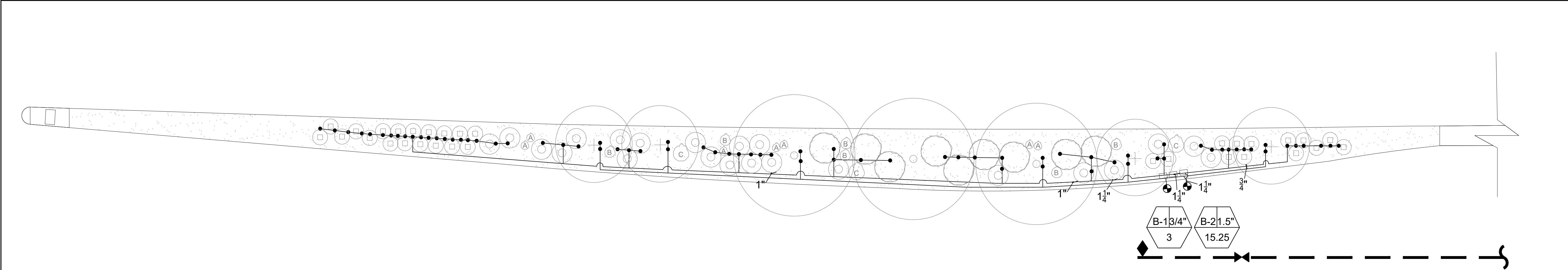


REGISTERED LANDSCAPE ARCHITECT
Robert T. Theis
DATE 07/30/18

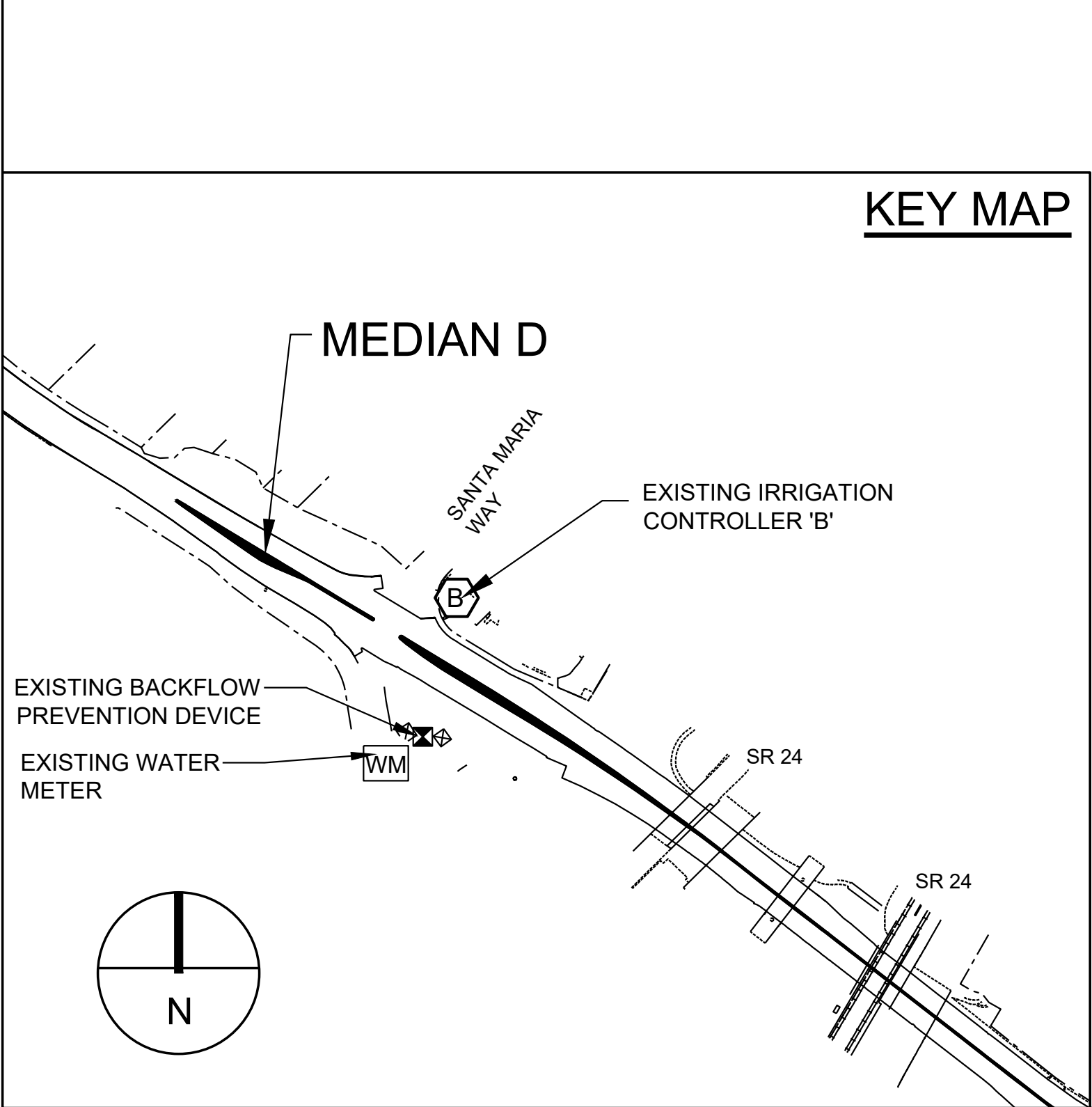
L2.3



PLANTING PLAN



IRRIGATION PLAN



KEY MAP

HYDROZONE INFORMATION TABLE

HYDROZONE	ZONE OR VALVE	IRRIGATION METHOD	AREA (SQ. FT)	% OF LANDSCAPE AREA
LW	A-1 & A-2	BUBBLER	2,633	29%
LW	A-3 & A-4	BUBBLER	2,850	31%
LW	A-5 & A-6	BUBBLER	1,416	15%
LW	B-1 & B-2	BUBBLER	2,322	25%

HYDROZONE
HW - HIGH WATER USE PLANTS
MW - MODERATE WATER USE PLANTS
LW - LOW WATER USE PLANTS

WATER BUDGET CALCULATIONS

MAXIMUM APPLIED WATER ALLOWANCE (MAWA)
THE PROJECT'S MAXIMUM APPLIED WATER ALLOWANCE SHALL BE CALCULATED USING THIS EQUATION:
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WHERE:
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 0.62 = CONVERSION FACTOR (TO GALLONS PER SQUARE FOOT)
 SLA = PORTION OF THE LANDSCAPE AREA IDENTIFIED AS SPECIAL LANDSCAPE AREA (SQUARE FEET)
MAXIMUM APPLIED WATER ALLOWANCE = 115,478 GALLONS PER YEAR

HYDROZONE	PLANT WATER USE TYPE	PLANT FACTOR	HYDROZONE AREA (HA) (SQUARE FEET)	PF x HA (SQUARE FEET)
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TOTAL			9,221	1,844

ESTIMATED TOTAL WATER USE
$$ETWU = (ET_0)(0.62)[(PF \times HA)(IE) + (SLA)]$$

WHERE:
ETWU = ESTIMATED TOTAL WATER USE PER YEAR (GALLONS PER YEAR)
 ET_0 = REFERENCE EVAPOTRANSPIRATION (INCHES PER YEAR)
PF = PLANT FACTOR FROM WUCOLS (SEE DEFINITIONS)
HA = HYDROZONE AREA (HIGH, MEDIUM, AND LOW WATER USE AREAS) (SQUARE FEET)
SLA = SPECIAL LANDSCAPE AREA (SQUARE FEET)
 0.62 = CONVERSION FACTOR (TO GALLONS PER SQUARE FOOT)
IE = IRRIGATION EFFICIENCY (0.81 FOR DRIP)
ESTIMATED TOTAL WATER USE = 63,388 GALLONS PER YEAR

IRRIGATION PLANTING PLANS:
MEDIAN D

SCALE: 1" = 10'
CITY PROJECT #4136

L2.4

DESIGNED: rt

DRAWN: nm

CHECKED: rt

DATE: 07-30-2018

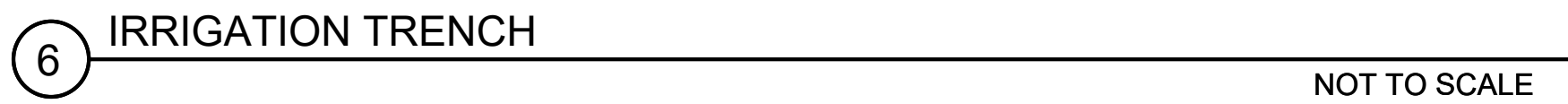
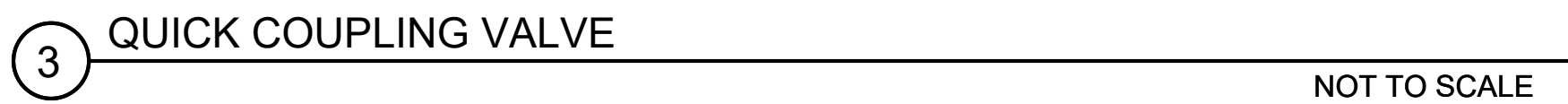
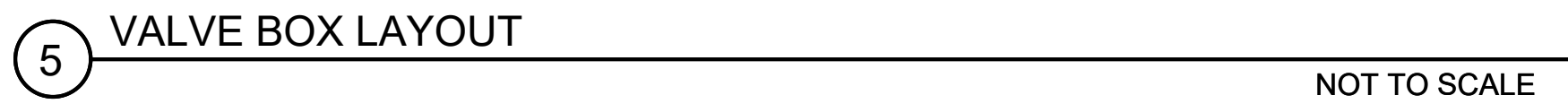
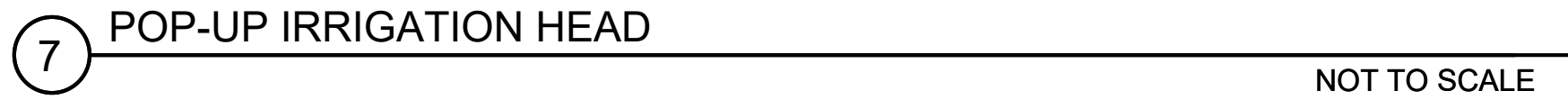
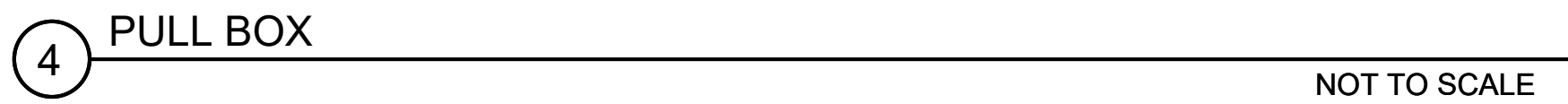
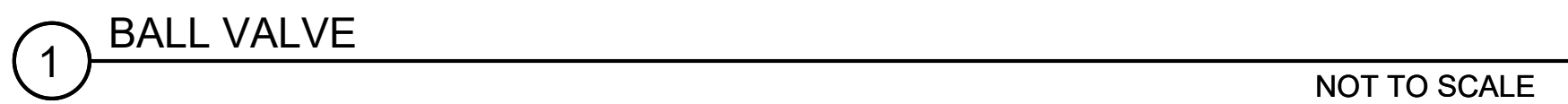
07/30/18

REGISTERED LANDSCAPE ARCHITECT

REVIEWED AND APPROVED BY:

DATE

CAMINO PABLO MEDIANS:
LANDSCAPE IMPROVEMENTS



REVIEWED AND APPROVED BY:

07/30/18

Robert Tander

REGISTERED LANDSCAPE ARCHITECT

DATE

CAMINO PABLO MEDIANS: LANDSCAPE IMPROVEMENTS

SCALE:
CITY PROJECT
#4136

L3.1

IRRIGATION DETAILS

